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Acronis True Image Home 2011

User's Guide

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1 Getting started

1.1 Introduction

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1.1.1 What is Acronis® True Image Home 2011?

Acronis True Image Home 2011 is an integrated software suite that ensures the security of all of the information on your PC. It can back up the operating system, applications, settings and all of your data, while also securely destroying any confidential data you no longer need. With this software, you can back up selected files and folders, settings and messages of Microsoft e-mail clients — or even the entire disk drive or selected partitions. Acronis Online Backup will allow you to store your most important files on a remote storage. Your data will be protected even if your computer is lost, stolen or destroyed. Acronis Nonstop Backup continuously saves changes in your system and files, as often as every five minutes, allowing you to rollback easily to any point in time if needed.

Should your disk drive become damaged or your system attacked by a virus or malware, you can recover the backed up data quickly and easily, eliminating hours or days of work trying to rebuild your disk drive's data and applications from scratch.

Acronis True Image Home 2011 provides you with all the essential tools to recover your computer system should a disaster occur, such as losing data, accidentally deleting critical files or folders, or suffering a complete hard disk crash. If failures occur that block access to information or affect system operation, you will be able to recover the system and the lost data easily.

The unique technology developed by Acronis and implemented in Acronis True Image Home 2011 allows you to perform exact, sector-by-sector disk backups. This includes backups of all operating systems, applications and configuration files, personal settings, and data.

Acronis True Image Home 2011 helps you protect your identity as well. Simply deleting old data will not remove it permanently from your computer. Acronis True Image Home 2011 now includes Acronis DriveCleanser that permanently destroys files and wipes personal information from partitions and/or entire disks, as well as the System Clean-up tool that cleans up your Windows system of all traces of user activity.

You can store backups on almost any PC storage device.

When performing scheduled backups, Acronis True Image Home 2011 automatically selects a backup mode (full, incremental, differential), in accordance with the backup scheme set by the user.

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Windows-style interface and wizards will make your work easier. Just perform a few simple steps and let Acronis True Image Home 2011 take care of everything else! When a system problem occurs, the software will get you up and running in no time.

1.1.2 What is Acronis True Image Home 2011 Plus Pack?

Acronis True Image Home 2011 Plus Pack is an add-on to Acronis True Image Home 2011. It is purchased separately, has a separate license, and is installed from its own setup file. Acronis True Image Home 2011 must be installed on your computer before the Acronis True Image Home 2011 Plus Pack can be installed. Acronis True Image Home 2011 Plus Pack adds the Acronis Universal Restore option for use during recovery. Acronis True Image Home 2011 Plus Pack also installs Acronis WinPE ISO builder and provides support for dynamic/GPT disks.

Here are the features of Acronis True Image Home 2011 Plus Pack in more details:

- Support of dynamic/GPT disks – operations with dynamic/GPT disks expand the range of hard drive configurations supported by Acronis True Image Home 2011. Dynamic disks offer greater flexibility for volume management and may provide benefits in computers with more than one hard drive. GUID Partition Table (GPT) is a new hard disk partitioning scheme providing advantages over the old MBR partitioning scheme. It was introduced as a part of the Extensible Firmware Interface (EFI) initiative.
- Users of Acronis True Image Home 2011 Plus Pack have the Universal Restore feature available to them. Acronis Universal Restore lets you restore an image of a Windows operating system to a different hardware environment. You can restore information on independent computers regardless of the hardware used on the independent computer. This may come in handy, for example, after replacing a damaged motherboard or when deciding to migrate your system from a desktop to a laptop. For more information see Acronis Universal Restore (p. 86).
- Acronis WinPE ISO builder – This program adds Acronis True Image Home 2011 plug-in to WinPE (Windows Preinstallation Environment) distributions based on any of the following kernels: WinPE 1.5, 2.x, 3.0. To be able to create or modify PE 2.x and 3.0 images, you must have Windows Automated Installation Kit (AIK) installed. Running Acronis True Image Home 2011 in the preinstallation environment may provide better compatibility with your computer's hardware because the preinstallation environment uses Windows drivers. For more information see Creating WinPE-based rescue media (p. 160).

1.1.3 Acronis True Image Home 2011 basic concepts

This section provides general information about basic concepts which could be useful for understanding how the program works.

Backup and recovery

Backup refers to the making copies of data so that these additional copies may be used to **recover** the original after a data loss event.

Backups are useful primarily for two purposes. The first is to restore a state following a disaster (called disaster recovery). The second is to recover small numbers of files after they have been accidentally deleted or corrupted.

Acronis True Image Home 2011 does both by creating disk (or partition) images and file-level backups respectively.

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By default, Acronis True Image Home 2011 stores an image of those hard disk sections that contain data (for supported file systems). However, you can select an option that lets you include an image of all of the sectors of a hard disk (a sector-by-sector backup). When you back up files and folders, only the data, and folder tree, are is compressed and stored. If the need arises, you will be able to recover both your system disk state and individual files.

Backup versions

Backup versions are the file or files created during each backup operation. If you do not use consolidation feature, the amount of versions created is always equal to the amount of times the backup is executed or to the amount of stored points in time.

So, a version represents a point in time to which the system or data can be recovered. To put it another way, backup versions represent full, incremental and differential backups - see Full, incremental and differential backups (p. 36).

There is one more type of incremental backup version. If you mount a partition in the read-write mode, the program assumes that the mounted image will be modified and creates an incremental version to capture the changes. This type of incremental version has somewhat different properties. For example, it cannot be consolidated.

The backup versions are similar to file versions. The file versions concept is familiar to those who use a Windows Vista and Windows 7 feature called "Previous versions of files". This feature allows you to restore a file as it existed on a particular date and time. A backup version allows you to recover your data in a similar way.

This could be useful when trying to find damaged or deleted files. Simply browse through the backup versions in the Acronis Backup Explorer until you find the backup version containing the required files. Additionally, you can recover different saved versions of the found files.

Disk cloning

This operation migrates or copies the entire contents of one disk drive to another disk drive. This may be necessary, for example, when installing a larger disk. The result is two identical drives with the same file structure. The "Disk Clone" tool effectively copies all of the contents of one hard disk drive onto another hard disk drive. The operation allows you to transfer all the information (including the operating system and installed programs) from one hard disk drive to another without having to reinstall and reconfigure all of your software.

If you decide to use cloning, the best chance of success is to remove the existing drive from the computer and install the new drive in its place. It should be connected in exactly the same way as the old drive.

Acronis True Image Home 2011 does not provide for cloning a single partition. You can only clone the entire drive.

You can also transfer all the information from your hard disk drive to another one by backing up the entire old hard disk and then recovering the backup to the new disk.

Snapshots

Acronis True Image Home 2011 uses "snapshot" technology which permits you to create system partition backups even while running Windows with files open for reading and writing. Rebooting the computer is not necessary.

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Once the program starts the partition backup process, it temporarily freezes all the operations on the partition and creates its "snapshot". Snapshot creation usually takes just several seconds. After that, the operating system continues working as the imaging process is under way.

The Acronis driver also continues to keep the point-in-time view of the partition. Whenever the driver sees a write operation directed at the partition, it checks whether these sectors are already backed up. If they are not, the driver saves the data on the sectors to be overwritten to a special buffer. Overwriting will then proceed.

All of the partition sectors of the point-in-time will be backed up intact and an exact "image" of the partition will be created.

Backup file format

Acronis True Image Home 2011 usually saves backup data in the proprietary tib format using compression. This reduces the amount of needed storage space. It also allows for backward compatibility with the previous Acronis True Image Home 2011 version.

When creating a tib file, the program calculates checksum values for data blocks and adds these values to the data being backed up. These checksum values allow for the verification of data integrity.

The data from tib file backups can be recovered only through the Acronis True Image Home 2011 program. This may be done in a Windows or in the recovery environment.

However, Acronis True Image Home 2011 is also able to save data in the well-known zip format. This allows you to retrieve files from backups anywhere without using Acronis True Image Home 2011.

For example, you can back up files to a USB stick and retrieve files from such backups on your notebook without installing Acronis True Image Home 2011. The most widely used operating systems Microsoft Windows and Mac OS X, have built-in support for the zip file format.

Acronis Nonstop Backup uses a special hidden storage for data and metadata. The backed up data is compressed and split into files of about 1 GB. These files also have a proprietary format and the data they contain can be recovered only with the help of Acronis True Image Home 2011.

Backup validation

The backup validation feature allows you to confirm that your system can be recovered. As mentioned above, the program adds checksum values to the data blocks being backed up. During backup validation, Acronis True Image Home 2011 opens the backup file, recalculates the checksum values and compares those values with the stored ones. If all compared values match, the backup file is not corrupted and there is a high probability that the backup can be successfully used for data recovery.

We recommend that validation of system partition backups take place when booting from a rescue media.

Acronis True Image Home 2011 lets users of Windows 7 Enterprise and Window 7 Ultimate ensure that they will be able to boot after a recovered system partition. The program allows you to boot from a tib file containing the system partition image. It converts the tib file into a VHD file which is then used for actual booting. If you can boot from the converted vhd file, you will be able to boot after recovering this backup to your disk.

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Consolidation

Consolidation allows you to delete backups which are no longer needed from a backup chain.

A chain to be consolidated can be comprised of a full backup and one or more incremental backups.

If necessary, you can delete the base full backup from the chain. The program will create a new full backup in place of the oldest remaining backup. Consolidation keeps whichever backups you choose and deletes any backups that are not selected.

Since consolidation may require significant time and system resources (including disk space), we recommend using it sparingly. In many cases, starting a new backup chain and then deleting the old one will be a better choice.

Acronis Nonstop Backup uses a different consolidation mechanism. The program consolidates the metadata it uses for managing the backed up data. Because the metadata information volume is significantly less than the backed up data volume, consolidation requires much less time and system resources.

Disaster recovery

Recovering from a disaster usually requires a rescue media.

Acronis True Image Home 2011 provides for recovery from a disaster caused by system data corruption, viruses, or malware.

If the operating system fails to boot, Acronis True Image Home 2011 will recover the system partition. The boxed product comes with a rescue CD. Other legal owners of the program can create a rescue media by using the Media Builder tool.

Scheduling

For your backups to be really helpful, they must be as "up-to-date" as possible. This means that you should run backups on a regular basis, say once a day. Although creating an Acronis True Image Home 2011 backup is quite easy, on occasion, you may forget to do a backup.

With the scheduler, you do not have to remember. You can schedule automatic backups ahead of time. Your data will be backed up as long as there is sufficient disk space.

Understanding these terms and concepts will be helpful when using the program's features.

1.1.4 New in Acronis True Image Home 2011

- **New user interface** – Redesigned user interface and usability enhancements, based on the results of usability testing, make Acronis True Image Home 2011 easier to use than ever before.
- **Predefined backup schemes** – Acronis True Image Home 2011 offers you predefined backup schemes designed for specific user needs - from a disk space-efficient scheme suitable for users with limited backup storage capabilities to a scheme for those users who need higher security for their data and system. The program offers different backup schemes for disk and file type backups. You just select a scheme and the program automatically manages your backups. In addition, you can create a custom backup scheme which will exactly suit your needs.
- **Check points** - The Acronis Backup Explorer timeline shows Windows and software installation and update dates. Moving your mouse over a check point opens a balloon with information about the update or software. With check points you can check the changes to your system and recover the system to a specific backed up state.

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- **USB 3.0 support** – Acronis True Image Home 2011 supports the new USB 3.0 standard. If your motherboard can work with USB 3.0 hard disk drives, you can use the high data transfer speed offered by the new standard to make your backups run much faster.
- **Enhanced Acronis Nonstop Backup** – Now you can use Acronis Nonstop Backup for protecting both partitions and individual files and folders. Protection of individual folders by Acronis Nonstop Backup usually requires much less storage space. In addition, the current version of Acronis True Image Home 2011 allows you to use the Acronis Secure Zone as Nonstop Backup storage. This may be desirable for notebook users with a single hard disk drive.
- **Automatic update notification** – By default, Acronis True Image Home 2011 will automatically inquire about the availability of a program update at every program start. When an update is available, Acronis True Image Home 2011 will offer to download and install it. You can also check for availability of updates manually through the Help menu.
- **New Backup Explorer** – Now you can use the Acronis Backup Explorer's time line for exploring not only Acronis Nonstop Backup and Acronis Online Backup contents, but contents of all other backups as well. Clicking **My backups** in the main window will show all your backups on the time line. In addition, you can start recovery of disks and partitions right from the time line.
- **Enhanced scheduler** – the completely redesigned scheduler makes scheduling much easier. In addition, it now allows you to wake up the sleeping/hibernating computer to perform a backup. The "At system shutdown" and "At user logoff" options are now available to users of Windows Vista and Windows 7.
- **Drag & Drop functionality** - you can recover backed up files by dragging them from Acronis Time Explorer to your Desktop or a folder of your choice. In addition, you can create shortcuts for backups by dragging their boxes from the My backups area on the main screen to your Desktop. This will allow you to run a backup by simply double-clicking on its shortcut. You can also create shortcuts for frequently used Acronis tools by dragging their icons from the **Start** menu to the Desktop.
- **Integration with Windows 7 Control Panel** - Acronis True Image Home 2011 replaces Windows Backup in the Backup and Restore item. The Backup and Restore window will show the Nonstop Backup and your oldest disk or partition backup. You will be able to recover the backed up data, refresh the backups, and pause/start Nonstop Backup directly from the Control Panel.

1.1.5 System requirements and supported media

1.1.5.1 Minimum system requirements

Acronis True Image Home 2011 has minimum hardware requirements corresponding to that of the operating system installed on the computer to be used for running Acronis True Image Home 2011. In addition Acronis True Image Home 2011 requires the following hardware:

- CD-RW/DVD-RW drive for bootable media creation
- Mouse or other pointing device (recommended).

Using Acronis Nonstop Backup requires at least 1 GB RAM.

Acronis True Image Home 2011 rescue media has the following hardware requirements:

- 512 MB RAM
- Processor Pentium 1 GHz or faster

The recommended screen resolution is 1280 x 1024.

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The minimum screen resolution is 800 x 600.

1.1.5.2 Supported operating systems

Acronis True Image Home 2011 has been tested on the following operating systems:

- Windows XP SP3
- Windows XP Professional x64 Edition SP2
- Windows Vista SP2 (all editions)
- Windows 7 (all editions)

Acronis True Image Home 2011 also lets you create a bootable CD-R/DVD-R that can back up and recover a disk/partition on a computer running any Intel- or AMD- based PC operating system, including Linux®. (Note that the Intel-based Apple Macintosh is not supported.)

1.1.5.3 Supported file systems

- FAT16/32
- NTFS
- exFAT
- Ext2/Ext3/Ext4 *
- ReiserFS *
- Linux SWAP *

If a file system is not supported or is corrupted, Acronis True Image Home 2011 can copy data using a sector-by-sector approach.

** The Ext2/Ext3/Ext4, ReiserFS, and Linux SWAP file systems are supported only for disk or partition backup/recovery operations. You cannot use Acronis True Image Home 2011 for file-level operations with these file systems (file backup, recovery, search, as well as image mounting and file recovering from images). You also cannot perform backups to disks or partitions with these file systems.*

1.1.5.4 Supported storage media

- Hard disk drives*
- Networked storage devices
- FTP servers**
- CD-R/RW, DVD-R/RW, DVD+R (including double-layer DVD+R), DVD+RW, DVD-RAM, BD-R, BD-RE***
- USB 1.1 / 2.0 / 3.0, FireWire (IEEE-1394) and PC card storage devices
- REV® and other removable media

* Acronis True Image Home 2011 does not support the following dynamic volume types: Mirrored and RAID-5. There are some additional limitations on operations with dynamic and GPT disks:

  - To perform operations with dynamic and GPT disks, you need separately purchased Acronis True Image Home 2011 Plus Pack
  - Creation of Acronis Secure Zone is not supported.

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- Recovery of a dynamic volume as a dynamic volume with manual resizing is not supported
- GPT disks can be recovered only "volume-to-volume" without the possibility of resizing
- Try&Decide cannot be used for protecting dynamic and GPT disks
- "Clone disk" operation is not supported for dynamic and GPT disks

** An FTP server must allow passive mode file transfers. For data to be recovered directly from an FTP server, the backup must consist of files no greater than 2GB each.

The firewall settings of the source computer should have Ports 20 and 21 opened for the TPC and UDP protocols to function. The **Routing and Remote Access** Windows service should be disabled.

*** Burned rewritable discs cannot be read in Linux without a kernel patch.

1.1.6 Technical Support

Maintenance and Support Program

If you need assistance with your Acronis product, please go to http://www.acronis.com/support/

Product Updates

You can download the latest updates for all your registered Acronis software products from our website at any time after logging into your **Account** (https://www.acronis.com/my) and registering the product. See **Registering Acronis Products at the Website** (http://kb.acronis.com/content/4834) and **Acronis Website User Guide** (http://kb.acronis.com/content/8128).

1.1.7 Trial version information

The trial version of Acronis True Image Home 2011 is fully operational. However, it will work only during the trial period.

To purchase the full version, please visit http://www.acronis.com/buy/atih/

Click **Go to main screen** to start Acronis True Image Home 2011 trial version.

Click **Buy now** to go to the official Acronis online store.

Click **Activate** if you have already purchased the full version and have a valid product serial number.

1.2 Acronis True Image Home 2011 installation and startup

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1.2.1 Installing Acronis True Image Home 2011

To install Acronis True Image Home 2011:

- Run the Acronis True Image Home 2011 setup file.
- Before installation, you can check for a newer Acronis True Image Home 2011 build on the Acronis Web site. If available, the newer version will be offered for installation.
- In the Install Menu, select the program to install: Acronis True Image Home 2011.
- Follow the install wizard instructions on the screen.

WWW.ACRONIS.COM
Acronis© True Image
Home 2011
Install Acronis True Image Home
Install Acronis True Image Home to back up and recover data on this computer.
There are no new versions for Acronis True Image Home
Click to check again.
Acronis True Image Home User's Guide
Download the latest version of Acronis True Image Home user's guide.
Technical Support
Contact Acronis technical support service.

Typical, **Custom** and **Complete** installation is available. By pressing **Custom**, you can choose not to install **Rescue Media Builder**.

With **Rescue Media Builder** you can create bootable rescue disks (see details in Creating bootable rescue media (p. 153)). You might not need this tool if you purchased a boxed product that contains a bootable CD. Installing the **Bootable Rescue Media Builder** will allow you to create bootable media or its ISO image at any time from the main program window or by running **Bootable Rescue Media Builder** on its own.

When installed, Acronis True Image Home 2011 creates a new device in the Device Manager list (**Control Panel** → **System** → **Hardware** → **Device Manager** → **Acronis Devices** → **Acronis True Image Backup Archive Explorer**). Do not disable or uninstall this device, as it is necessary for connecting image backups as virtual disks (see Mounting an image (p. 200)).

1.2.2 Extracting Acronis True Image Home 2011

When installing Acronis True Image Home 2011, you can save the setup (.msi) file on a local or network drive. This will help when modifying or recovering the existing component installation.

To save the setup file:

- Run the Acronis True Image Home 2011 setup file.
- In the Install Menu, right-click on the program name and select **Extract**.
- Select a location for the setup file and click **Save**.

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Recovering or updating the existing Acronis True Image Home 2011 installation with using the .msi file must be done from the command line as follows:

1. Choose **Start** → **Run**
2. Type *cmd*.
3. When the command-line interpreter window opens, type the following command:
   msiexec /i path_to_msi_file\msi_file_name.msi REINSTALL=ALL REINSTALLMODE=vomus

After the install wizard window opens, choose **Typical**, **Custom** or **Complete** installation for repairing or changing the program's components.

1.2.3 Running Acronis True Image Home 2011

You can run Acronis True Image Home 2011 in Windows by selecting **Start** → **Programs** → **Acronis** → **Acronis True Image Home 2011** → **Acronis True Image Home 2011** or by clicking on the appropriate shortcut on the desktop.

If your operating system does not load for some reason, you can run Acronis Startup Recovery Manager. However, it must be activated prior to use; see Acronis Startup Recovery Manager (p. 152) to learn more about this procedure. To run the program, press F11 during bootup when you see a corresponding message that tells you to press that key. Acronis True Image Home 2011 will be run in standalone mode, allowing you to recover the damaged partitions.

If your disk data is totally corrupted and the operating system cannot boot (or if you have not activated Acronis Startup Recovery Manager), load the standalone Acronis True Image Home 2011 version from the bootable media, supplied with the retail box or created by you using Rescue Media Builder. This boot disk will allow you to recover your disk from a previously created image.

*When running Acronis True Image Home 2011, users of Windows Vista and Windows 7 with enabled User Account Control (UAC) may be prompted by UAC for permission to perform certain operations. To continue with the operation, click **Yes** in the prompt pop-up window.*

1.2.4 Upgrading Acronis True Image Home 2011

If you already have Acronis True Image Home 2011 installed, the new version will simply update it; there is no need to remove the old version and reinstall the software.

The backups created by the later program version may be incompatible with the previous program versions. If you roll back Acronis True Image Home 2011 to an older version, you likely will have to re-create the backups using the older version. We strongly recommend that you create new bootable media after each Acronis True Image Home 2011 upgrade.

1.2.5 Removing Acronis True Image Home 2011

Select **Start** → **Settings** → **Control panel** → **Add or remove programs** → **<Acronis True Image Home 2011>** → **Remove**. Then follow the instructions on the screen. You may have to reboot your computer afterwards to complete the task.

If you use Windows Vista or Windows 7, select **Start** → **Control panel** → **Programs and Features** → **<Acronis True Image Home 2011>** → **Remove**. Then follow the instructions on the screen. You may have to reboot your computer afterwards to complete the task.

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If you have Acronis Secure Zone on your computer, remove it before removing the program itself because removing Acronis True Image Home 2011 will not remove the zone.

1.3 Getting to know Acronis True Image Home 2011

In this section

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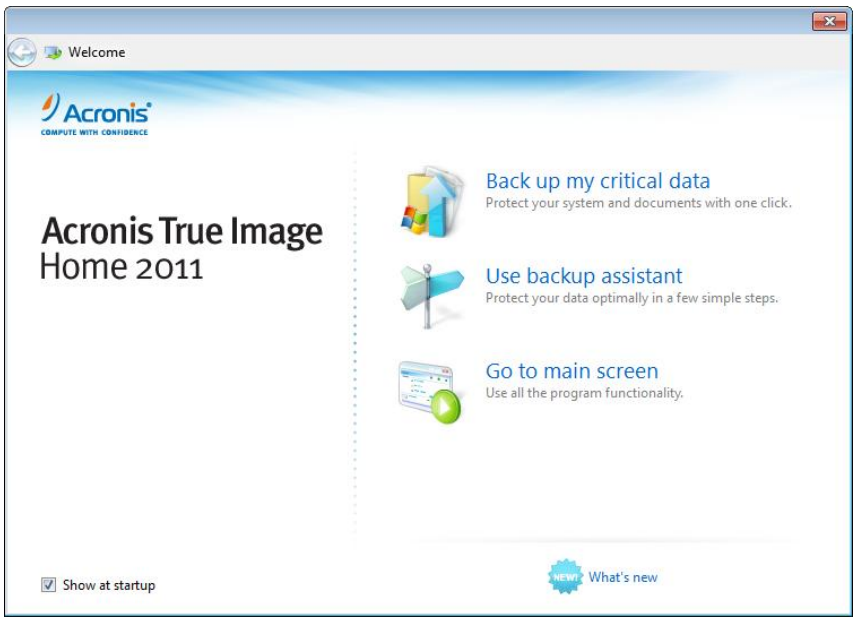
Wizards and notification area icons....25
Acronis Backup Explorer....26
Integration with Windows 7....32

1.3.1 Welcome screen

When you start Acronis True Image Home 2011 for the first time after installation, it will search for Acronis backups on your computer. If any backups are found (created by the current or an earlier version of Acronis True Image Home 2011), the Welcome screen will be skipped. All found backups will be added to the backup list in the program.

The Welcome screen appears if:

- No backups have been found during search.
- Some backups have been found, but no information about the backups is available for Acronis True Image Home 2011 (backup source, backup destination, backup schedule etc.). For example, this may occur if a backup was created on another computer. Acronis True Image Home 2011 will add them to the backup list.
- If you have a large number of preexisting backups or if the overall performance of your system is low, the search for backups may take a long time. In this case, the Welcome screen may also appear.



Welcome screen offers you to choose the following items:

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- **Back up my critical data**

  Select this item to use the Acronis One-Click Backup tool that allows you to begin protecting your computer as soon as you install Acronis True Image Home 2011. The default settings provide regularly updated backup of your system partition, and nonstop protection of your personal data. The tool will also analyze your storage devices and choose the optimum place for the backups.
- **Use backup assistant**

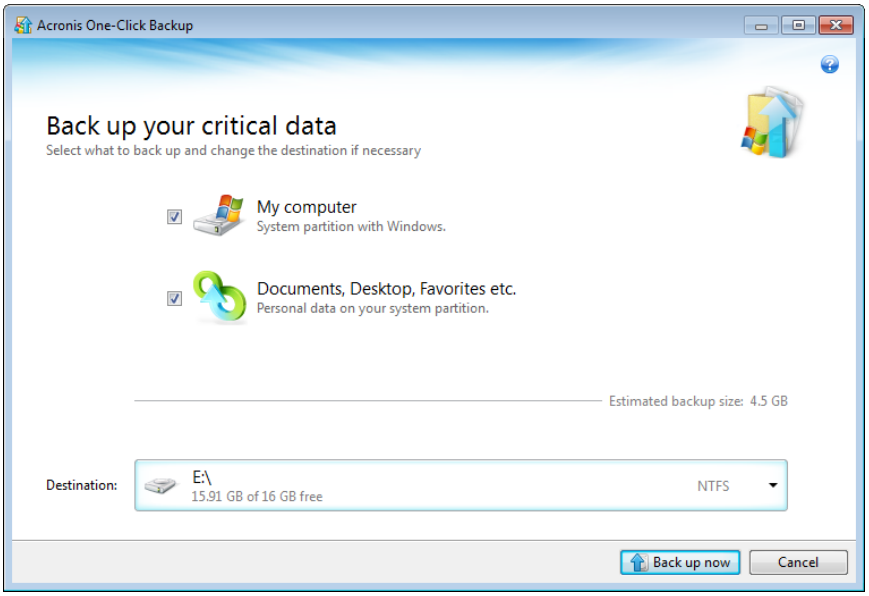
  Select this item if you want the program to assist you in choosing what data to back up, how and where to back up.
- **Go to main screen**

  Select this item if you want to go to the main program window.

1.3.1.1 Acronis One-Click Backup

The Acronis One-Click Backup tool allows you to begin protecting your critical data as soon as you install Acronis True Image Home 2011. Once One-Click Backup is set up (this takes just a few moments), one click provides full-time protection.

When you choose to protect your critical data, the program will offer to back up the system partition and your personal data to a destination it considers the optimum place for backups (see the destination selection algorithm below). You can choose another destination for backups by clicking the down arrow to the right of the destination and browsing for a destination you prefer.



By default, Acronis True Image Home 2011 will schedule subsequent full backups of the system partition once a month. After completing a new full backup, the program will delete the old one to save disk space.

The program also lets you enable continuous protection of your personal data. For information on the default content of that data see What personal data is protected by One-click Backup (p. 19).

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*After the selected items are backed up, you can change the default settings for My computer backup and personal data backup. To do this, select the appropriate backup on the main screen and then click **Edit backup settings** in the **Operations** menu.*

If you choose a removable media as the backup destination (for instance, an USB hard drive), it will be made bootable by default. In other words, a bootable recovery environment, a standalone Acronis True Image Home 2011 version and the backed up data, will be written to the removable media.

You will be able to run Acronis True Image Home 2011 from the removable media on a bare-metal system or a crashed computer that cannot boot. Just make the removable media device the first boot device in BIOS, boot to Acronis True Image Home 2011 and recover your system and/or personal data.

To start One-Click Backup, click the **Back up now** button. Clicking **Cancel** will cancel One-Click Backup. If you decide to use this feature later, click **Tools & Utilities** in the main program menu and then choose **Acronis One-Click Backup**.

Destination selection algorithm

For those interested in how One-Click Backup tool selects a destination for backup, here is the algorithm the program uses:

1. First of all, the program estimates the space required for operation of the One-Click Backup tool.
2. If there is an external hard drive with enough free space, the backups will be stored on that drive because such backup location will provide better protection for your computer.
3. If the first option is unavailable but you have at least two internal hard drives, the program will back up to a non-system hard drive using a partition with the maximum free space.
4. If your computer has only one hard drive with several partitions (not counting hidden ones), then the program will use the non-system partition with maximum free space.

What personal data is protected by One-Click Backup

The content of the personal data differs depending on your operating system.

For Windows 7 and Windows Vista

The contents of C:\Users\User folder:

- Documents
- Desktop
- Contacts
- Downloads
- Favorites
- Links
- Music
- Pictures
- Saved Games

For Windows XP

The contents of C:\Documents and Settings\User folder:

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- Documents
- Desktop
- Downloads
- Favorites

Here "User" is the username of the account under which you have logged on.

1.3.1.2 Backup assistant

If you want to protect your data, but you are not sure what data to protect and how to do this, the backup assistant will help you to make an optimum choice. In a few simple steps, you will create a backup of your data. The backup will allow you to recover your data to a known good state in case of corruption. Now let's go through the backup assistant steps together. Click **Use backup assistant** on the Welcome screen. Then decide for yourself:

What do you want to back up?

- **My computer** - select this item to back up your system partition. Such a backup allows you to protect all data on your system partition and recover your system if needed. To better protect your system from a crash, you must create a bootable rescue media or activate Acronis Startup Recovery Manager. This will allow you to recover your system if Windows does not start.
- **Files and folders** - select this item to back up your documents, including photos, videos, music, text files and any other files and folders. Such a backup allows to recover your documents from a virus attack, accidental deletion and corruption.
- **E-mail** - select this item to back up your e-mail messages, address book, settings, and accounts. Such a backup allows you to recover them in case of e-mail data loss or corruption.

After you have decided what data to back up, click **Next** and we'll help you to continue with the backup process.

How do you want to protect your computer or data?

- **Back up on a schedule** - this method allows you to back up your data on a regular basis by specifying your own schedule for backup operations. The program will back up your data according to the schedule you specify.
- **Use nonstop protection** - this method is much easier to use than backing up on a schedule, but it requires more disk space. Your changed data will be backed up automatically every 5 minutes. Every data change will be saved and you will be able to recover your data state for any date and time.
- **Store in online storage** (available only when you have selected **Files and folders** in the previous step) - you can purchase safe storage for your data. This safe storage is located on an Acronis remote server which is accessible via the Internet. Keeping data in this online storage guarantees that you will be able to recover the data even if your home computer was physically destroyed or stolen.

After you choose what data to back up and the optimal protection method, the program will display the window from which you will start the backup process. This window contains all of the settings for your backup. These settings were configured by the program according to the choices you made. If you want, you can change them, and set other options. After you have made sure that all settings are correct, click the **Back up now** button (or **Start now**, if you have chosen nonstop protection) to start the backup operation. After that a new backup box will appear in the **My backups** list and will show

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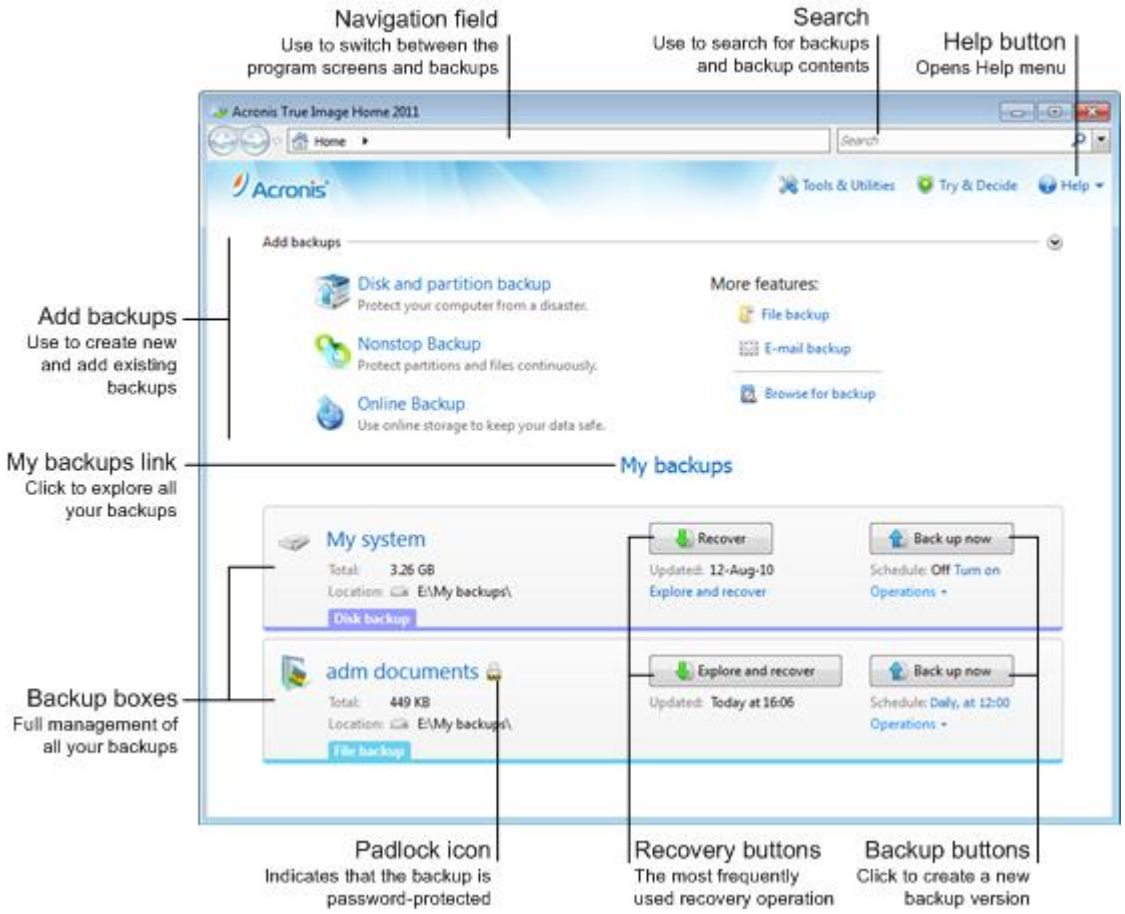
the backup progress. When the process is complete, the backup is created. Now your data is protected and can be recovered in case of disaster.

The Acronis True Image Home 2011 2011 Online Backup application will start if you select a backup to online storage. After the application starts, login to your Online Backup account or register a new account. To register the account, click the **Subscribe to Online Backup service** link.

1.3.2 Main screen

Starting Acronis True Image Home 2011 takes you to the main screen. This screen provides quick access to practically all of the program's functionality.

If you have not created any backups yet, the program will offer to create a new backup with Acronis One-Click Backup tool or manually. If you have at least one backup, the screen will display the list of your backups.



Add backups area

To create a new or add an existing backup to the backup list, you can use the **Add backups** area. It contains the following items:

- **Disk and partition backup**
- **Nonstop Backup**

  If the backup list already includes a Nonstop Backup, this item changes to **Edit Nonstop Backup settings**, because you can run only one Nonstop Backup at a time.

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- **Online Backup**
- **File backup**
- **E-mail backup**
- **Browse for backup**

  Click this item to browse for backups on your computer and add them to the backup list. This may be useful when you have backups created by a previous Acronis True Image Home 2011 version which are not shown in the backup list.

If the added backup was created by a previous Acronis True Image Home 2011 version or copied from another computer, you will be unable to perform some operations. In particular, you cannot refresh the backup by clicking **Back up now**. Also, you cannot edit and clone the backup settings and schedule. To be able to perform the unavailable operations, you may recreate the settings of the added backup by selecting **Operations** → **Recreate backup settings** (for more information, see "Operations menu" later in this section).

My backups area

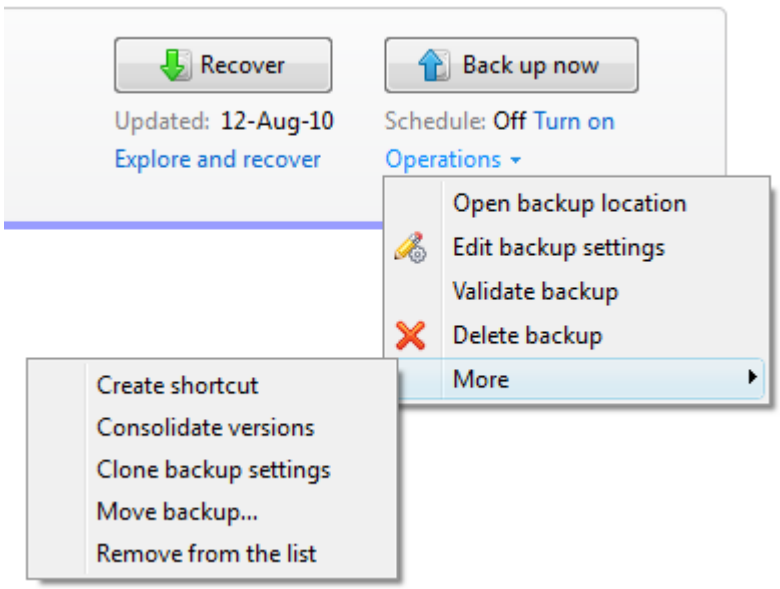
The area shows the backups you already have. It provides access to all operations with the existing backups and allows you to start recovery of your data.

To start recovery of the latest backup, select the backup containing the data you need to recover and then click **Recover**. When an image backup contains more than one backup version, click the **Explore all versions** link below the **Recover** button. This will open the Acronis Backup Explorer with the **Disks and partitions** tab selected. You can also open the Acronis Backup Explorer by clicking on the backup name.

You can update an existing backup at any time by selecting it in the backup list and clicking **Back up now**.

If you want to explore all of the backups you have, click the **My backups** link. The program will open the Acronis Time Explorer. You will be able to explore the existing backups using the time line. For more information on using the time line for navigating through backups, see Time line (p. 29).

Operations menu



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Clicking **Operations** in the box of a selected backup opens an **Operations** menu containing the following items:

- **Open backup location** - opens the folder containing the backup files.
- **Edit backup settings** - allows editing of the current backup settings.
- **Recreate backup settings** (available only for backups manually added to the backup list) - allows configuring the settings for image, file, and e-mail backups created by a previous Acronis True Image Home 2011 version. This item may also appear for backups created on another computer and added to the backup list without importing their settings.
- **Validate backup** - starts backup validation.
- **Delete backup** - deletes all backup versions of the current backup at their location. Be careful, as the deletion cannot be undone.
- **More** - opens the following additional items:
  - **Create shortcut** - creates a shortcut on the Desktop. The shortcut allows you to run a backup without starting Acronis True Image Home 2011.
  - **Consolidate versions** - allows you to delete the backup versions you no longer need while maintaining the consistency of the backup.
  - **Clone backup settings** - clones the current backup settings when you need to create several similar backups. Clone the backup settings and then introduce the required changes.
  - **Move backup...** - allows moving all the backup files to another location. The subsequent backup versions will be saved to the new location.

    If you change the backup destination by editing the backup settings, only new backup versions will be saved to the new location. The earlier backup versions will remain in the old location.

  - **Remove from the list** - removes the current backup from the backup list shown in the My backups area. This operation also turns off the scheduling of the removed backup (if a schedule was set), but it does not delete the backup files.
- **Clean up...** (available for Nonstop Backup only) - opens the **Cleanup** dialog box where you can delete the backup versions you no longer need. The backup chain will not be corrupted.

*In case of Nonstop Backup the **Operations** menu will have less items. The **Operations** menu of backups created on another computer and added to the backup list without importing the backup settings will also have less items.*

To collapse an expanded backup box into a narrow strip, right-click in the free area of the box and select **Collapse** in the shortcut menu. You can also collapse an expanded backup box by double-clicking on it.

To expand a collapsed box, right-click in the free area of the box and select **Expand** in the shortcut menu or double-click on the box.

When a backup box is collapsed, the **Operations** menu contains additional items related to backup and recovery operations available for the backup:

- **Back up now** - adds a new backup version to the existing backup or replaces the existing backup version, depending on the backup scheme being used.
- **Explore and recover** - opens the **Backup Explorer** window.
- **Start** (available for a nonstop backup only) - starts nonstop backup protection.
- **Pause** (available for a nonstop backup only) - suspends nonstop backup protection.

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To turn on or change the schedule for the selected backup, click the link to the right of **Schedule:**. For more information see Scheduling (p. 139).

Search

To search for a backed up file you need to recover, type the filename or part of its name, in the search field on the main menu bar. If the search is successful, the program will open Acronis Backup Explorer and show the found file and backup(s) containing the file.

Menu bar

The menu bar on the main screen allows you to choose several major program features.

The menu bar includes the following items:

Tools & Utilities

Choose this menu item to open the Tools & Utilities screen with a list of all Acronis True Image Home 2011 tools and utilities to choose from.

Try&Decide

Choose this menu item to turn on and off the Acronis Try&Decide feature and to change the Try&Decide settings.

Help

Choose this item to open the program's Help, go to the Welcome screen, generate a system report, view the log, get customer support, check for updates, etc.

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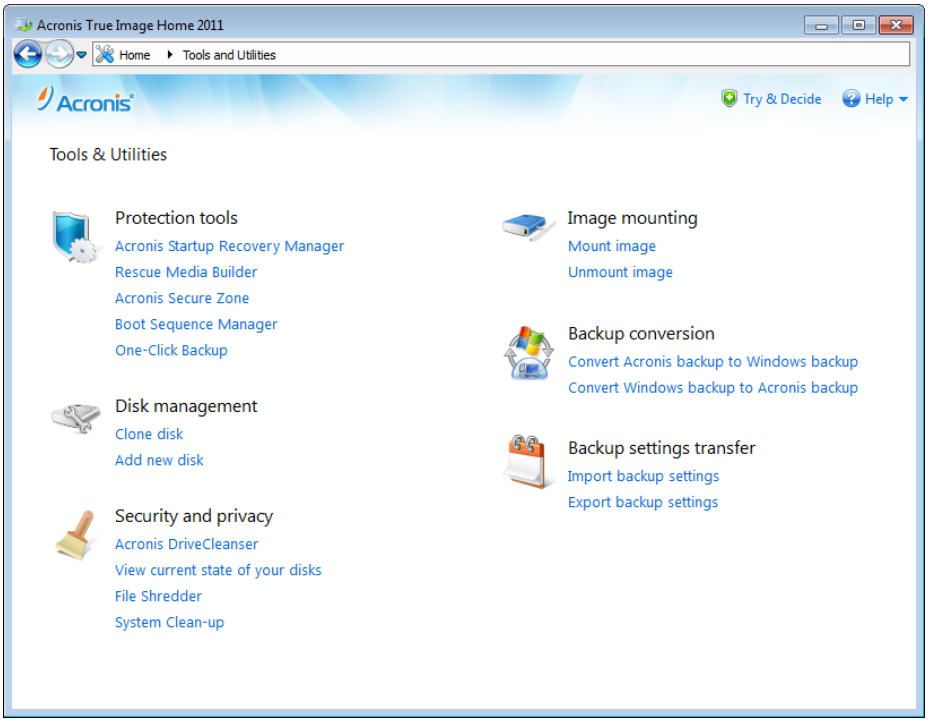
1.3.3 Tools & Utilities screen

This screen allows you to select the tools and utilities provided by Acronis True Image Home 2011. To go to the screen, click **Tools & Utilities** in the main menu. Launch the required tool or utility by clicking the appropriate link. For more information see Tools & Utilities (p. 151).



To return to the main screen, click the "Back to" button in the navigation field at the top of the screen or **Home** in the same field.

1.3.4 Wizards and notification area icons

When you use the available Acronis True Image Home 2011 tools and utilities, the program will in many cases employ wizards to guide you through the operations.

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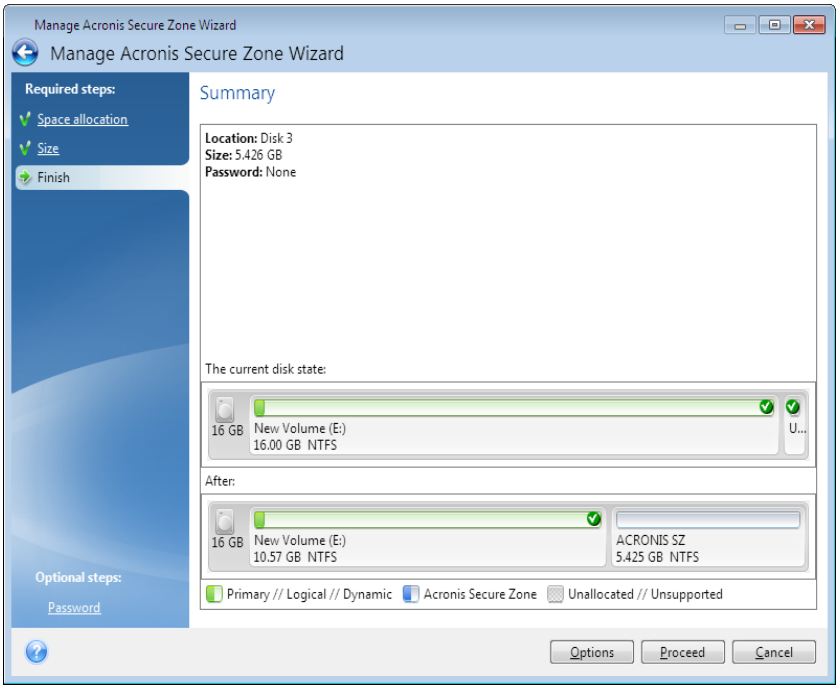
Wizards have a sidebar listing all the steps (both required and optional) needed for completing the operation. For example, see the Manage Acronis Secure Zone wizard screen shot below.



The completed steps are marked with green checkmarks. The green arrow shows the current step. After you complete all the required steps and come to the **Finish** step, the program displays the Summary screen. Check the summary of the operation to be performed and then click **Proceed** to start the operation.

Taskbar notification area icons

During most of the operations, special indicator icons appear in the Windows taskbar notification area (the right portion of the status bar with the clock). If you mouse over the icon, you will see a tool tip indicating the operation's progress or state. Right-clicking on the icon opens a shortcut menu where you can change the operation's status or cancel the operation if necessary. This icon doesn't depend on the main program window being open. It is present for background execution of scheduled backups as well.

1.3.5 Acronis Backup Explorer

The Acronis Backup Explorer provides you with a wealth of information on your backups: backup types, backup versions number, dates, contents, backup results, etc. In addition, the Backup Explorer allows you to explore and recover backed up data (both partitions and individual files and even file versions). It also allows for operations with backups - you can validate them, convert to Windows backup (only disk backups), mount images as disks, and delete backup versions you no longer need.

Let's have a closer look on the Acronis Backup Explorer. It has two tabs for viewing backups and their content: **Disks and partitions** (available for disk backups only) and **Files and folders**.

1.3.5.1 Disks and partitions tab

The **Disks and partitions** tab shows the backed up disks and partitions that the selected backup version contains.

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The tab shows the disks and partitions state of when the current backup version was created.

You can switch between the backup versions by using the time line at the bottom of the screen. For more information see Time line (p. 29).

To recover disks and/or partitions:

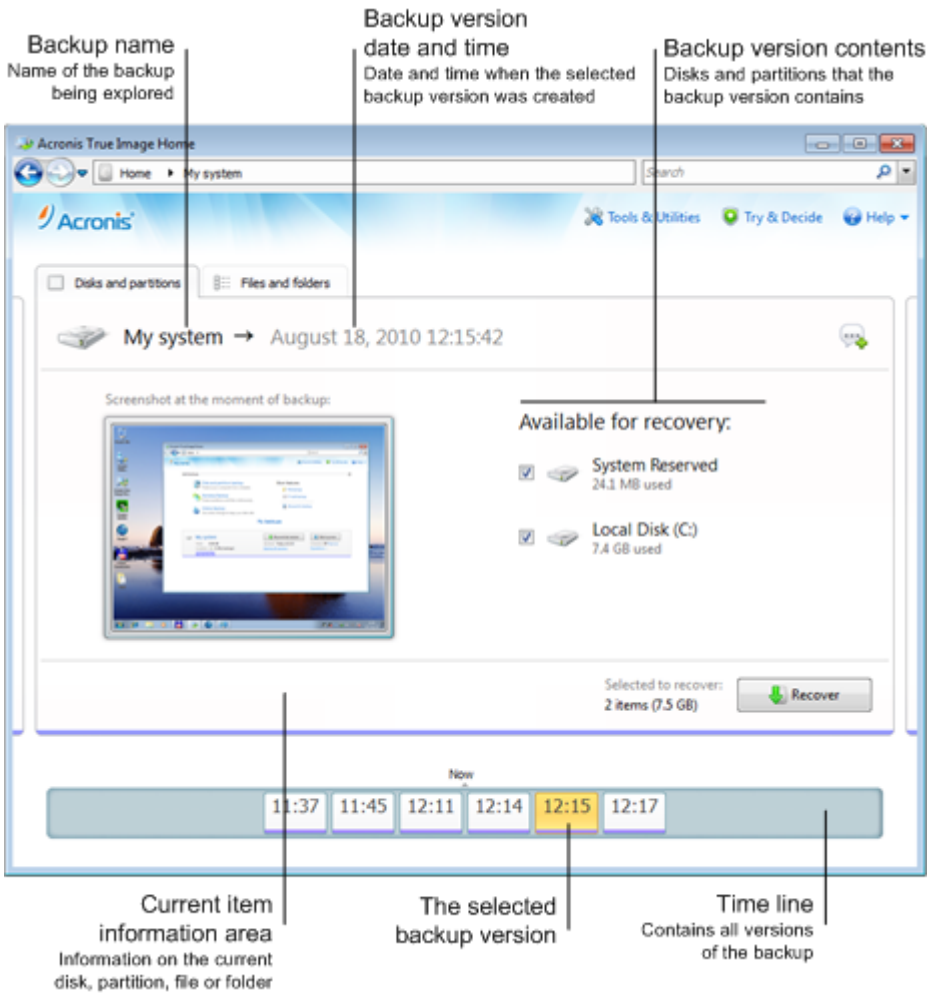
1. On the time line, select the backup version from which you want to recover your disks/partitions.

   The version's exact date and time will be displayed near the backup name. Your data will be recovered to the state it was at that point in time.
2. Select the corresponding check boxes of the disks or partitions you want to recover.
3. Click the **Recover** button.

To recover specific files and folders from the disk/partition backups:

1. Click **Explore files and folders**. The **Files and folders** tab will open.
2. Select files and folders you want to recover.
3. Click the **Recover** button.

For more information on recovering files and folders see Files and folders tab (p. 28).



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Right-clicking on a backup version opens the shortcut menu with other available operations:

- **Recover** - select to recover the current backup version.
- **Validate** - select to check the integrity of the backup version data.
- **Convert to Windows backup** (for image backups) - select to convert the backup version's TIB file to VHD file.
- **Mount** (for image backups) - select to mount the backup version as a disk.
- **Delete version** - select to delete the backup version (the backup chain will not be corrupted).
- **View** - select to set up the time line to show some additional information.

To find a file or folder you need to recover, type the file or folder name in the search field.

Both tabs also show backup comments, and allow for adding, editing and deleting comments to the selected backup version. If a backup version does not have comments, click the **Add comment** icon, then type your comments in the comments area and click the **Save** icon. If there is already a comment, you can edit it after clicking the **Edit** icon. Having finished editing, click the **Save** icon to save the changed comment or the **Cancel** icon to cancel the changes. To remove the comment, click the **Delete** icon.

1.3.5.2 Files and folders tab

The **Files and folders** tab shows the backed up files and folders contained in the selected backup version. The left-hand area of the tab shows a directory tree and the right-hand area - the contents of a selected directory tree item.

The tab shows the files and folders states of when the current backup version was created. You can switch between the backup versions by using the time line at the bottom of the screen. For more information on using the time line see Time line (p. 29).

To recover files and/or folders:

1. On the time line, select the backup version, from which you want to recover your files/folders.

   The version's exact date and time will be displayed near the backup name. Your data will be recovered to the state it was at this point in time.
2. Select the corresponding check boxes of the files and folders you want to recover (see selection rules below). Short information about the selected items (their number and total size) will be displayed near the **Recover** button.
3. Click the **Recover** button.

You can also recover files and folders by dragging them to your Desktop or into a selected folder in Windows Explorer.

You cannot recover files by dragging them to an FTP, recordable CD/DVD or other optical media, as well as mounted ISO files.

Selection rules

Check boxes that correspond to the items may be in the following states:

- **Selected** (check mark in square) - this state indicates that the item is selected for recovery. A selected folder means that all items in the folder are selected.
- **Cleared** (clear square) - this state indicates that the item is not selected.

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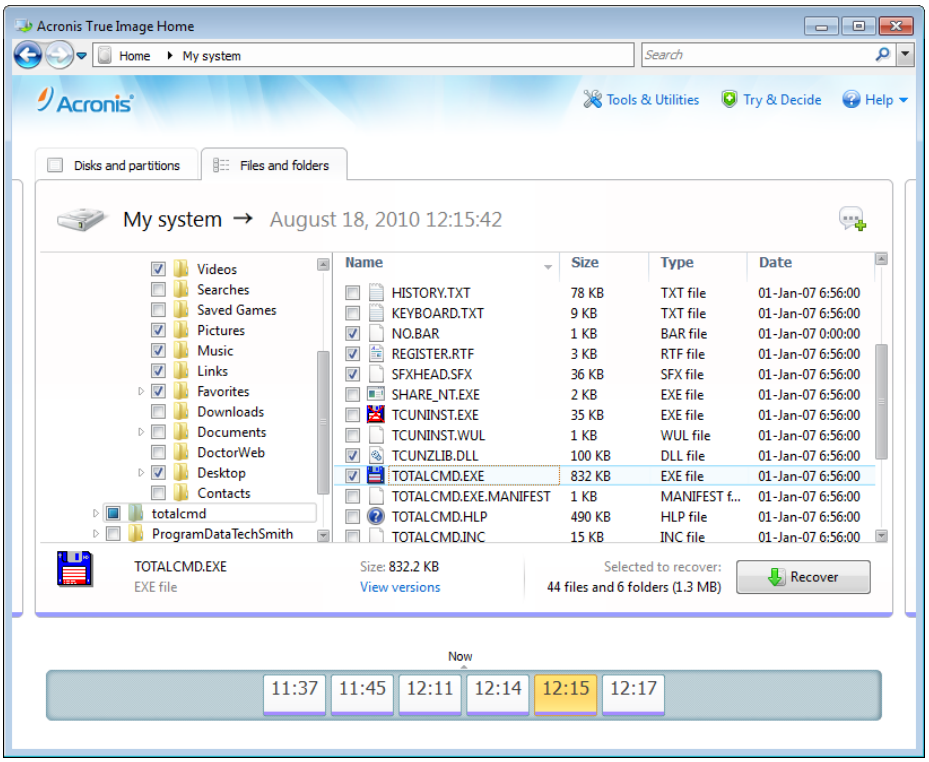
- **Mixed** (filled square) - this state is available for folders only and indicates that some items in the folder are selected and the others are not. Note that you cannot set the state by clicking the check box, but you can change it to a cleared or selected state.

Selecting a disk, partition, file or folder to make it the current item in a list does not mean selecting it for recovery!



The majority of user interface elements located on this tab are described in the Disks and partitions tab (p. 26) section. Here we describe the items specific for the tab.

When you click an item, short information on this item is displayed under the browser area. The set of displayed parameters depends on the item's type. Clicking the **View versions** link opens the View Versions window with a list of all versions of the file in the backup. You can recover a desired version by its backup time.

By double-clicking on a file in the right-hand area, you will recover the file to a temporary folder. The file will open by using an associated application, i.e. Windows Explorer.

1.3.5.3 Time line

Usually the time line at the bottom of Acronis Backup Explorer screen shows information on the backup versions stored in the selected backup. The time line provides easy navigation through backup versions and allows you to recover your data to the state it was in at a certain date and time.

If you click the **My backups** link in the main window, the time line will show all of the backups you have. You can also display all of your backups by choosing the **My backups** item from the drop down list in the Navigation field. To open the list, click the arrow icon to the right of **Home** in the Navigation field.

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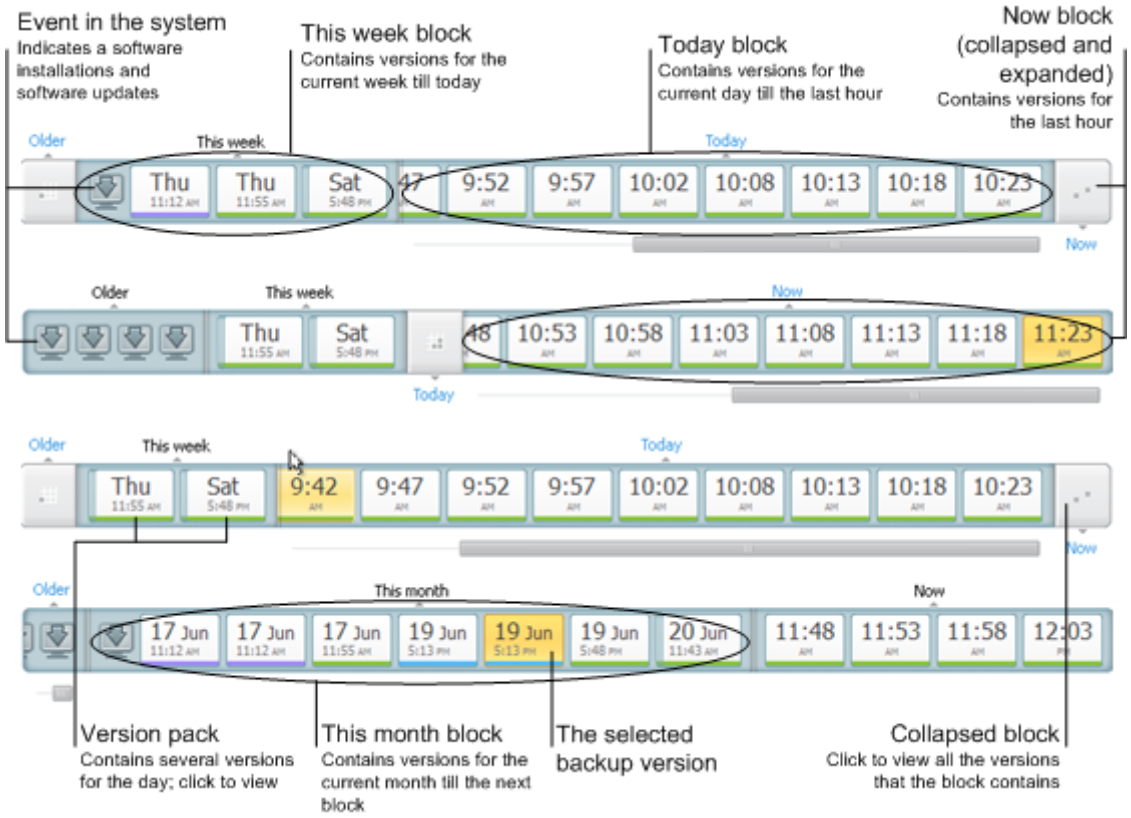
The squares that represent backup versions have colored stripes at the bottom. The color of the stripes depends on the backup types (violet for disk backups, turquoise for file backups, green for Nonstop Backup, and brown for other backups, e.g. created by a previous Acronis True Image Home 2011 version).

The picture below shows various states of a time line. Its states vary depending on the number of backups and the time interval through which you are navigating.


Event in the system
Indicates a software installations and software updates
This week block
Contains versions for the current week till today
Today block
Contains versions for the current day till the last hour
Now block (collapsed and expanded)
Contains versions for the last hour
Older
This week
Today
Now
This month
Version pack
Contains several versions for the day; click to view
This month block
Contains versions for the current month till the next block
The selected backup version
Collapsed block
Click to view all the versions that the block contains

The "Now" interval shows backup versions created during the last hour. When using Nonstop Backup, backup versions may be created as often as every five minutes

The "Today" interval shows backup versions created from the beginning of the current day to the last hour.

The "week" interval can be named either "Week ago" or "This week".

When today is Monday, Tuesday or Wednesday, the "week" interval is named "Week ago". In such cases, the time line shows backup versions created during the previous week and from the beginning of the current week to the beginning of today.

When today is Thursday, Friday, Saturday or Sunday, the "week" interval is named "This week". In such cases the time line shows backup versions created from the beginning of the current week to the beginning of today.

The "month" interval can be named either "Month ago" or "This month".

When today is any date from the 1st to 15th day of the month, the "month" interval is named "Month ago". In that case the time line shows backup versions created during the previous month and from the beginning of the current month to the "week" interval.

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When today is any date from the 16th to 31st day of the month, the "month" interval is named "This month". In that case the time line shows backup versions created from the beginning of the current month to the "week" interval.

The "This year" interval shows backup versions created from the beginning of the current year to the “month” interval.

The "Older" interval shows backup versions created from earlier than the beginning of the current year.

Working with time intervals and backup versions

Time intervals may be expanded (when the number of backup versions fits onto the time line) or folded into a square "block". When a time interval is expanded, the squares representing backup versions may contain a "warning" or "error" icon. Such an icon indicates that warning(s) or error(s) have been written into the Log during version creation.

If more than one backup version has been created during a day within "week", "month", "year", or "older" time interval, such a date is shown on the time line using a special "version pack" icon.

If you hover over a folded block for more than half a second, a balloon will show the information about the time interval start, its end, and the number of backup versions it contains.

If you hover over a backup version within an expanded time interval, a balloon will show more detailed information about the backup version.

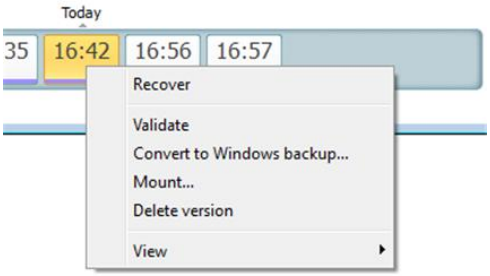
Clicking on a folded block or its name above or below the time line expands the corresponding time interval. If the number of backup versions within the time interval is too big to fit onto the time line, the horizontal scroll line allows you to navigate through the backup versions within the time interval.

If you select another folded block and there is no room for displaying all backup versions of the newly expanded block, then the current expanded block will collapse.

By clicking on a backup version, you select it in the Backup Explorer.

Shortcut menus

Right-clicking on the time line opens the shortcut menu. The menu contents will change depending on the selected item.



Disk backup version:

- Recover
- Validate
- Convert to Windows backup...
- Mount...

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- Delete version

File backup version:

- Validate
- Delete version

Nonstop backup version and online backup version:

- Explore and recover
- Delete version

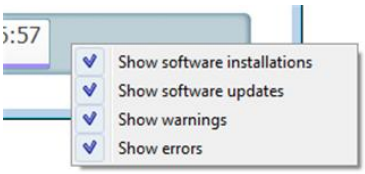
Backup version packs and time blocks:

Right-clicking on a folded version pack or time interval's block opens the shortcut menu with a single item:

- Expand

Viewing additional information on the time line

You can also set up the time line to show additional information. The appropriate commands are available in the **View** submenu. The **View** submenu is opened by right-clicking on a backup version or by right-clicking on time line's free space.



- **Show software installations** - if this item is selected, the time line shows icons that indicate moments when new programs have been installed on your computer.
- **Show software updates** - if this item is selected, the time line shows icons that indicate updates of Windows and programs installed on your computer.
- **Show warnings** - if this item is selected, the time line shows all the backup versions that have been suspended or completed with warning messages (selected by default).
- **Show errors** - if this item is selected, the time line shows failed backup versions and backup versions that have completed with errors.

1.3.6 Integration with Windows 7

During installation Acronis True Image Home 2011 provides closer integration with Windows 7. Such merging allows you to get the most out of your computer. The new user-friendly interface makes starting backup and recovery much faster.

Integration adds Acronis True Image Home 2011 items to the Windows Start menu, changes the properties of the Acronis True Image Home 2011 button on the taskbar, and adds the ability to configure and perform Acronis True Image Home 2011 operations using Windows 7 Control Panel.

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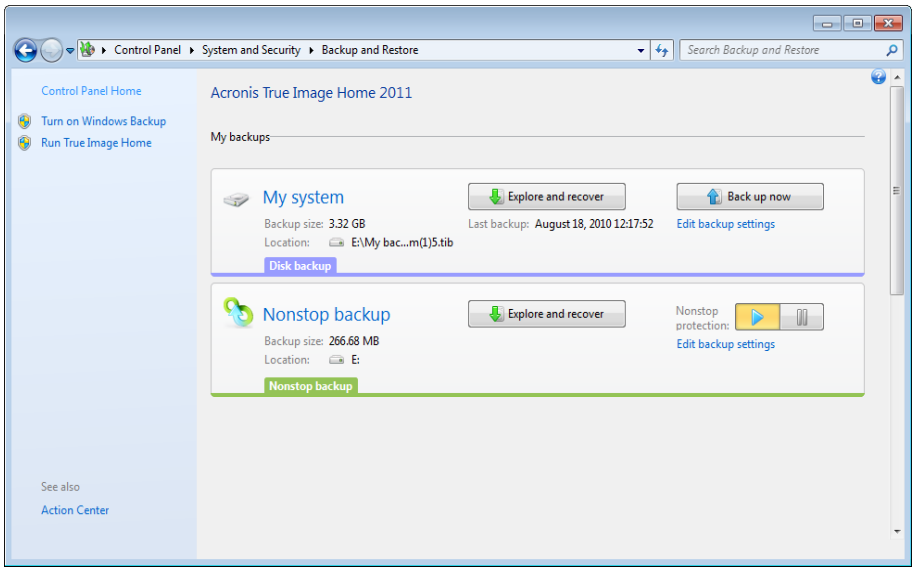
The most significant changes occur in the System and Security category of Windows 7 Control Panel. Acronis True Image Home 2011 replaces Windows Backup in the Backup and Restore item. If you first installed Acronis True Image Home 2011 without performing backups, the Backup and Restore window allows you to create a backup using Acronis One-Click Backup tool.



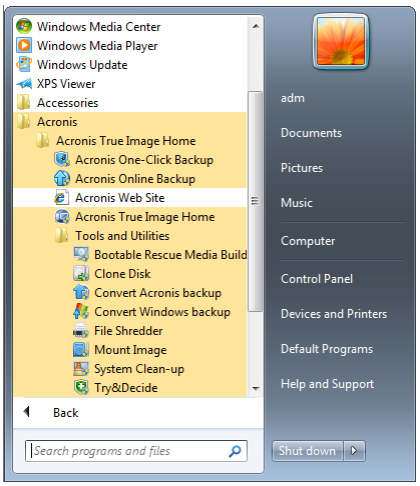
When you have created backups, the Backup and Restore window will show the Nonstop Backup box and the box of your oldest disk or partition backup. You can recover the backed up data, refresh the backups, and pause/start Nonstop Backup directly from the Control Panel.

If you want to resume using Windows Backup, click **Turn on Windows Backup** on the left pane. This will remove Acronis True Image Home 2011 from the Control Panel and replace it with Windows Backup.

---

*If later you decide to integrate Acronis True Image Home 2011 into Windows 7 again, click **Help** on the toolbar and select **Integrate True Image into Windows**.*

Furthermore, the **Start** menu acquires the following Acronis True Image Home 2011 items:



These menu items allow you to use the main program features, tools, and utilities without starting Acronis True Image Home 2011.

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2 How to

Due to the size of this User's Guide, it is sometimes not so easy to find how to perform a particular task.

This section lists some frequently used tasks and provides links to the appropriate parts of the User's Guide.

Click the corresponding page number (or the link, if you are viewing the Help), if you need information on how to:

- protect your entire system from a disaster (p. 122)
- recover your system when your computer refuses to boot (p. 68)
- back up your photos, finance documents, music, home video (p. 40)
- continuously protect your daily work (p. 46)
- back up your e-mail (p. 43)
- create a bootable rescue media (p. 153)
- select a suitable video mode when booting from your rescue media (p. 130)
- make sure that your rescue media can be used when needed (p. 129)
- try some changes to your system without risk (p. 133)
- create and use the Acronis Secure Zone (p. 164)
- recover your old backup to a new hardware/migrate the system from one computer to another (p. 82)
- clone your disk drive (p. 171)
- add and partition a new hard disk (p. 178)
- be sure that your data is not accessible to anyone else (p. 57)
- automatically refresh your backups: Backup schemes (p. 53) or Scheduling (p. 139)
- find a backup that contains the file you need to recover (p. 142)

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3 Backing up data

Acronis True Image Home 2011 includes a wealth of sophisticated backup capabilities that would please even an IT professional. They allow you to back up your disks (partitions), files, and e-mail. You can choose a backup feature that suits you most or use them all. The below sections describe the backup features in more detail.

In this section

The difference between file backups and disk/partition images 35
Full, incremental and differential backups 36
Backing up partitions and disks.....38
Backing up files and folders 40
Backing up e-mail.....43
Using Acronis Nonstop Backup 44
Making reserve copies of your backups.....48
Backup to various places.....50
Adding an existing backup to the list 51
Excluding items from backup 51
Backup options.....52
Validating backups 65
Consolidating backup versions.....65
Cloning backup settings 67

3.1 The difference between file backups and disk/partition images

A backup is a copy of selected files, folders or information stored on disks.

When you back up files and folders, only the data and folder tree are compressed and stored.

Disk/partition backups are different from file and folder backups. Acronis True Image Home 2011 stores a sector-by-sector snapshot of the disk. This includes the operating system, registry, drivers, software applications data files, and system areas hidden from the user. This procedure is called "creating a disk image," and the resulting backup is often called a disk/partition image.

By default Acronis True Image Home 2011 stores only the hard disk parts that contain data (for supported file systems).

Furthermore, Acronis True Image Home does not back up swap file information. It will not back up pagefile.sys under Windows XP and later and it will not back up hiberfil.sys (a file that keeps RAM contents when the computer goes into hibernation). This reduces image size and speeds up image creation and recovery.

However, you can still use the **Back up sector-by-sector** option that lets you include all of the sectors of a hard disk in an image.

A partition image includes all files and folders (including hidden and system files), boot record, and FAT (file allocation table). It also includes files in the root directory and the zero track of the hard disk with the master boot record (MBR).

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A disk image includes images of all disk partitions and the zero track with the master boot record (MBR).

By default, files in all Acronis True Image Home 2011 backups have a ".tib" extension. This extension should not be changed.

It is important to note that you can recover files and folders from both file backups and from disk/partition images. To do so, mount the image as a virtual disk (see Mounting an image (p. 200)) or use Acronis Backup Explorer to select the files and/or folders you need to recover from the disk/partition backup.

3.2 Full, incremental and differential backups

Acronis True Image Home 2011 offers you three backup methods:

1) **Full**: contains all of the data at the moment of the backup creation. It forms a base for further incremental or differential backups. It can also be used as a standalone backup.

2) **Incremental**: Only those files will be included which have been changed since the LAST backup.

3) **Differential**: Only those files will be included which have been changed since the last FULL backup.

We suggest you to choose one of the following three approaches of using the backup methods:

"**Full**" - A standalone full backup might be an optimal solution if you often roll back the system to its initial state or if you do not like to manage multiple files.

"**Incremental**" - These are most useful when you need frequent backups and the ability to roll back to a specific point in time. Having created a full backup once, if you then create an incremental backup each day of a month, you will get the same result as if you created full backups every day. Incremental images are considerably smaller than full or differential images.

> Such a backup scenario may consist of a weekly full system backup with intermediate, daily backups that cover data that was changed since the LAST backup.
>
> This scenario, while requiring less storage space and time for the daily backups, will require more work on your part to provide recovery after a system crash. In the event of a Thursday crash, you would have to recover the last FULL backup followed by the Monday, Tuesday and Wednesday incremental backups.

"**Differential**" – is an intermediate between the first two approaches. It is also good when the conditions are intermediate. Each differential backup includes all the files changed since the last full backup. It takes less time and space than "Full", but more than "Incremental". The good thing is that recovering is simpler than for (2) - you'll have to recover the last full backup and the last differential backup.

Examples and recommendations

To choose a desired backup method, you need to configure a custom backup scheme. For more information see Custom scheme (p. 55).

You can choose any approach for each of your backup projects according to their size and frequency of file modifications. For example if almost all the included files appear changed before an incremental backup starts, the incremental backup will be almost of the same size as a full backup would be. If so, let it be "Full" to simplify the recovery.

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A "differential" backup scenario uses the same weekly full system backup with the backup of files that have changed since the last full backup on a daily basis.

While this scheme takes up progressively more storage space as each new day of the week passes, a recovery would only involve two backups - the last FULL backup followed by the previous day's differential backup. Many users prefer this method as it simplifies recovery and most backups are done overnight.

In these examples, the only differences in the two backup scenarios are:

Incremental backups require less storage space while differential backups require more.

Incremental backups require all of the backups used for that week in order to do a complete recovery, while the differential backup only requires a maximum of two backups at any given time.

An incremental or differential backup created after a disk is defragmented might be considerably larger than usual. This is because the defragmentation program changes file locations on the disk and the backups reflect these changes. Therefore, it is recommended that you re-create a full backup after disk defragmentation.

If you lose an incremental backup version or it becomes corrupted, all later incremental backup versions will be unusable.

Deleting backups and backup versions

You may want to delete backups and backup versions you no longer need. Acronis True Image Home 2011 stores information on the backups in a metadata information database.

Therefore, deleting unneeded backup files by using Windows Explorer will not delete information about these backups from the database, and Acronis True Image Home 2011 will consider that they still exist.

This will result in errors when the program tries to perform operations on the backups that no longer exist. So you must only remove obsolete backups and backup versions by using the tools provided by Acronis True Image Home 2011.

To delete an entire backup:

On the main screen, find the corresponding backup box, click **Operations**, and then click **Delete backup**.

When you delete an entire backup, all its versions will be deleted as well.

To delete a specific backup version:

1. On the main screen, find the corresponding backup box, click **Explore and recover** or **Explore all versions**.
2. In Backup explorer, right-click the version you want to delete, and then click **Delete version**.

When you delete a backup version, please remember that this version may have dependent versions. In this case the dependent versions will be deleted as well, because data recovery from such versions becomes impossible.

- **If you delete a full backup version** - the program will also delete all subsequent incremental and differential versions till the next full version.

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- **If you delete an incremental backup version or a differential backup version** - the program will also delete all subsequent incremental versions till the next full or differential version.

3.3 Backing up partitions and disks

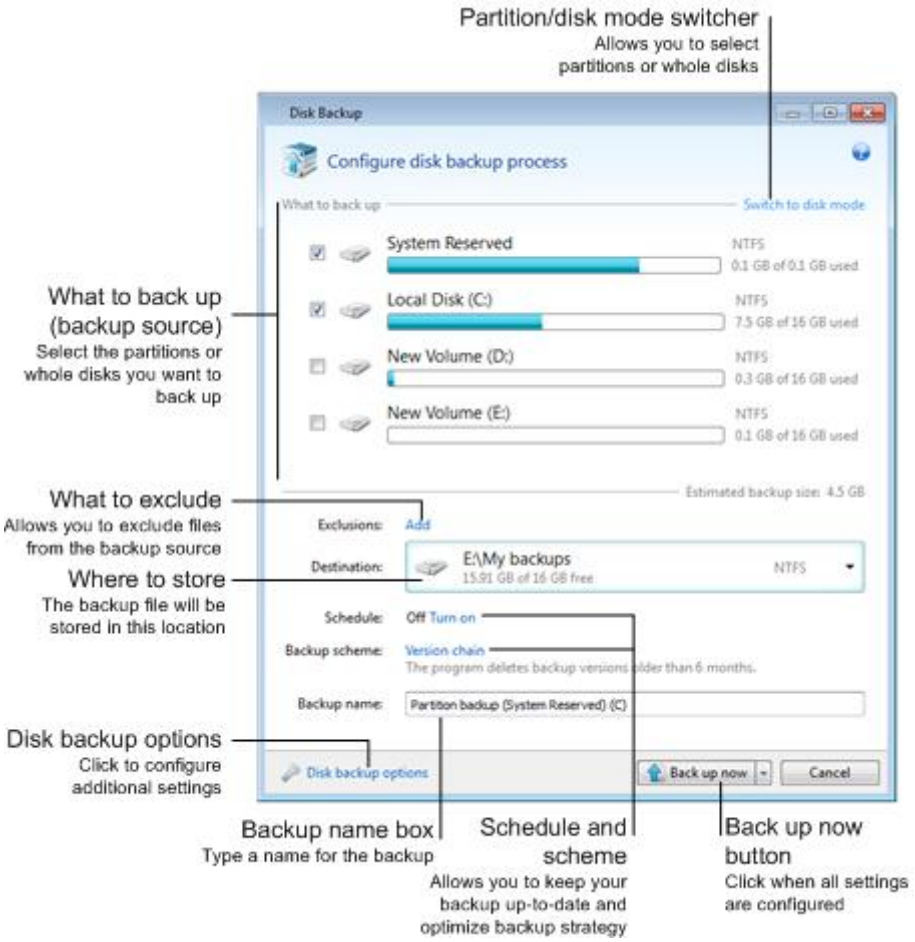
The image backup is made as easy as ABC.

a) Select a partition to back up by selecting its check box. If the disk has several partitions and you want to back up the whole disk, click **Switch to disk mode** and then select the disk's check box. To return to the partition selection, click **Switch to partition mode**.

b) Select a destination for backup (you can leave the default destination or browse for a destination after clicking the down arrow to the right of the current destination and selecting **Browse...**).

c) Click **Back up now**.

Of course, you can also schedule the backup, change the default backup options, exclude files and folders from backup. To configure the backup, click the appropriate links.



The below steps describe how to configure a backup using most of the available image backup settings.

1. Select a partition(s) to back up by selecting its check box. If the disk has several partitions and you want to back up the whole disk, click **Switch to disk mode** and then select the disk's check box. To return to the partition selection, click **Switch to partition mode**.

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2. You may exclude certain files and folders from backup. For example, you transferred some movies from your DVDs to a folder on the data partition. They occupy quite a lot of space and it doesn't make sense to back them up because you have the DVDs. To exclude the folder, click the **Add** link to the right of **Exclusions** and add the folder to the excluded items list.
3. Select a destination for backup (you can leave the default destination when it suits you or browse for a destination after clicking the down arrow to the right of the current destination and selecting **Browse...**).

   When the backup destination is any removable media (USB stick, BD, DVD...), the **Make this media bootable** check box appears. Selecting the check box will result in creating a bootable recovery environment on the removable media and adding a standalone Acronis True Image Home 2011 version. You will be able to run Acronis True Image Home 2011 from the removable media on a bare-metal system or the crashed computer that cannot boot.

   If possible, avoid storing your system partition backups on dynamic disks, as the system partition is recovered in the Linux environment. Linux and Windows work with dynamic disks differently. This may result in problems during recovery.
4. If you need the backup to run on a schedule, click the link to the right of **Schedule**, turn on scheduling and set the required schedule. For more information see Scheduling (p. 139).
5. You can also change the default backup scheme by clicking on the appropriate link. For more information see Backup schemes (p. 53).
6. If you would like to assign a specific name to the backup, type the name in the **Backup name** field instead of the default one.

   You can also add useful information to the backup name. To do so, click the down arrow to the right of the destination and click **Browse...**. Select the items you want to add in the right field of the **File name** line:

   - add date - the backup creation date will be added
   - add time - the backup creation time will be added
   - add user name - the current user name will be added
   - add machine name - the computer name will be added
   - add task name - the name of the task that includes the backup will be added
   - add task run number - the sequence number of the task run will be added
7. Click **Disk backup options** to set the options for the backup being configured. For example, when your data disk contains sensitive information, you may want to protect the information by encryption. You can also choose to validate the backup immediately after its creation, though it can be done later. For more information see Backup options (p. 52).
8. When you set up the backup as needed, you can run it immediately by clicking the **Back up now** button. If you want to run the backup later or on a schedule, click the down arrow to the right of the **Back up now** button and select **Later** in the drop down list to save the settings you have made.

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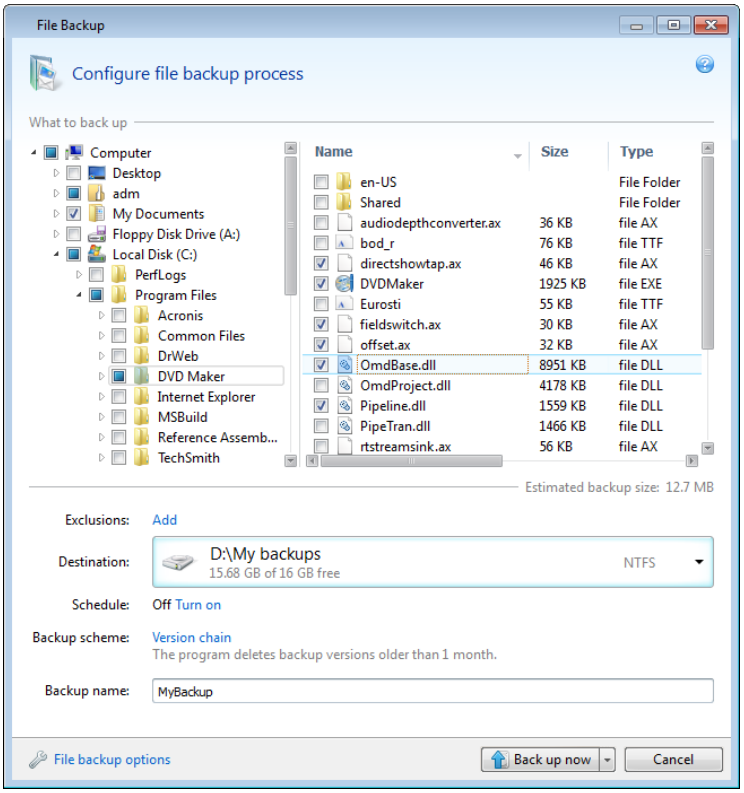
3.4 Backing up files and folders

To back up files and/or folders, click **File backup** on the main screen. This will open the **File Backup** window.



Let's consider how to use this backup type for backing up a folder.

1. Select the folder on the directory tree in the **What to back up** area. The right side will show the folder contents with all the files and subfolders selected. There you can unselect the files you do not need to back up, if any.
2. Select a destination for backup (you can leave the default destination or browse for a destination after clicking the down arrow to the right of the current destination and selecting **Browse...**).

   When the backup destination is any removable media (USB, BD, DVD...), the **Make this media bootable** check box appears. Leaving the check box selected will result in creating a bootable recovery environment on the removable media and adding a standalone Acronis True Image Home 2011 version. You will be able to run Acronis True Image Home 2011 from the removable media and recover the backed up data even on a crashed computer that cannot boot.
3. By default the program will assign the name of the folder to be backed up to the backup, but if you would like to assign another name, type the name in the **Backup name** field.

   You can also add useful information to the backup name. To do so, click the down arrow to the right of the destination and click **Browse...**. Select the items you want to add in the right field of the **File name** line:

   - add date - the backup creation date will be added
   - add time - the backup creation time will be added
   - add user name - the current user name will be added
   - add machine name - the computer name will be added
   - add task name - the name of the task that includes the backup will be added

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- add task run number - the sequence number of the task run will be added

4. Click the **Back up now** button if you want to run backup immediately. You can also delay the start of backup for up to 6 hours by clicking the down arrow to the right of this button and selecting a delay interval from the dropdown list.

When you need to change the default backup options, click **File backup options** and set the options you require. You can also change the default backup scheme by clicking on the appropriate link. For more information see Backup schemes (p. 53).

If you want to run the backup on a schedule, click the **Turn on** link to set up a schedule (for more information see Scheduling (p. 139)). To run the backup on the schedule, click the down arrow to the right of the **Back up now** button and select **Later** in the drop down list. The backup with the settings you have made will run according to the schedule. You can also start the backup manually later on the main screen.

The program allows you to back up files by categories. For more information see Data categories (p. 41).

You can exclude hidden or system files and folders from backup, as well as files matching the criteria you specify. To add exclusion criteria, click the **Add** link to the right of **Exclusions**. While adding criteria, you can use the common Windows wildcard characters. For more information see Excluding items from backup (p. 51).

3.4.1 Data categories

The program allows you to back up files by categories. When selecting the file category(ies), you automatically select for backup all files of associated types found on the computer's hard drives. You can use the following default categories: **Video**, **Music**, **Images**, **Finance**, and **Documents**. Furthermore, you can add any number of custom categories containing files and folders. The new categories will be saved and displayed along with the above. You can change the contents of any custom or default file category (edit the category) or delete it. The default file categories cannot be deleted.

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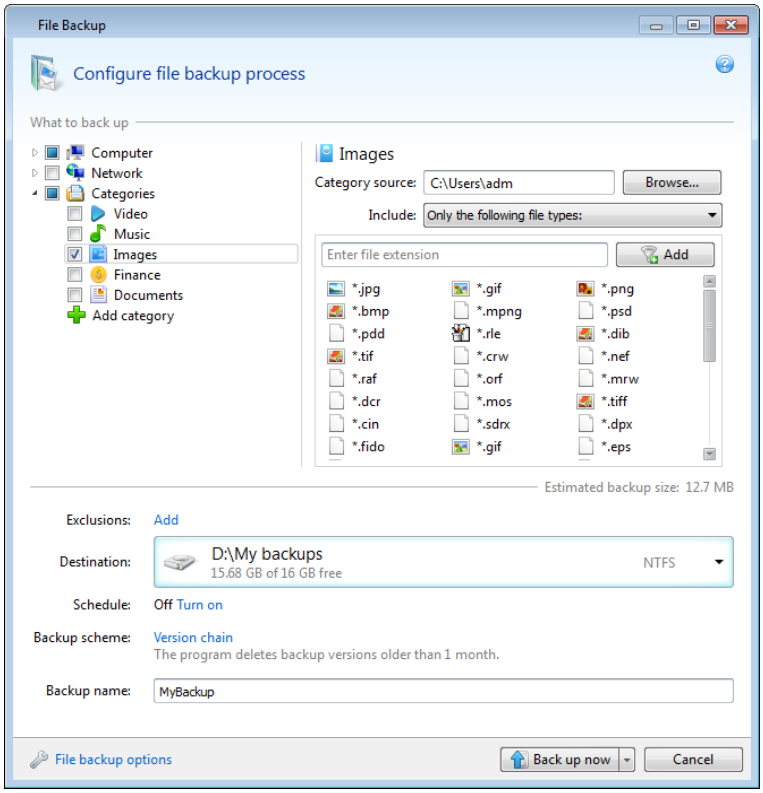
To add a custom data category, click **Add category.** To change the default name of a custom category, double-click the name and enter a new one. Select the data source (e.g. a folder) for the new category by clicking the **Browse...** button. By default the new category will contain **All data from the source**, but you can apply filters to select the specific types of files that you wish or do not wish to back up.



To set a filter, select its type: **Only the following file types** or **All data except the following file types**.

You can add file types for the selected filter by entering their extensions in the appropriate field one at a time and then clicking **Add**.

The added file types appear in the window below.

3.4.2 Support for Zip format

Now you will be able to retrieve files from backups anywhere without using Acronis True Image Home 2011, if you use the zip format instead of the tib format.

For example, you can back up files to a USB stick and retrieve these backed up files from your notebook at home without installing Acronis True Image Home 2011. This is true because the most widely used operating systems (Microsoft Windows and Mac OS X) have built-in support of the zip file format.

Please note that built-in support of zip files in Windows does not cover operations with multivolume zip archives, and zip backups exceeding 4GB in size or which contain files of more than 4GB each.

The Zip format is available when backing up files, folders or when making reserve copies of your backups.

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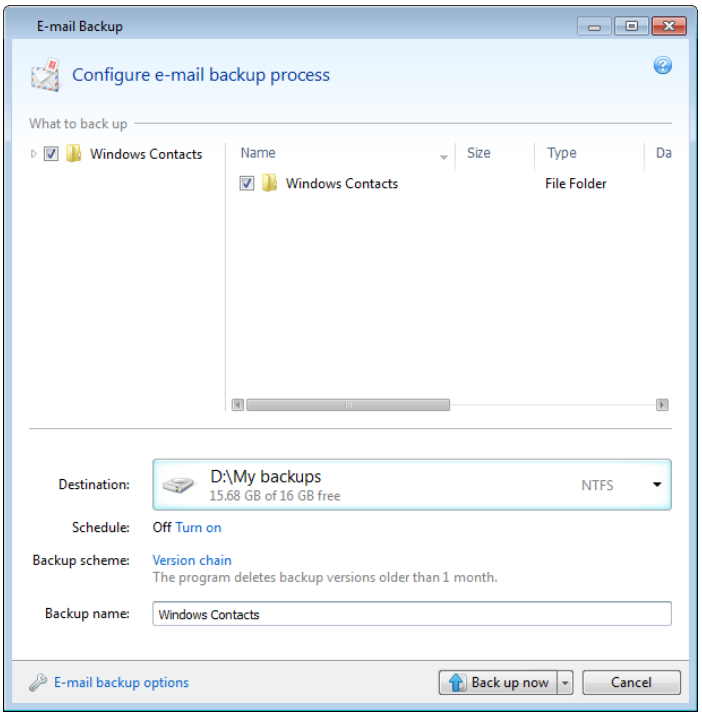
Acronis True Image Home 2011 gives the zip format most of the functionality available for the tib format. You can schedule backups, validate zip backups, recover files and folders from zip backups, make incremental and differential backups, etc.

However, it does not provide password protection and encryption.

Acronis True Image Home 2011 can recover and validate only its own zip backups. If a zip archive was created by a file archiver program, it cannot be recovered and validated by Acronis True Image Home 2011.

3.5 Backing up e-mail

Acronis True Image Home 2011 allows you to back up messages, accounts and settings for Microsoft Outlook 2000, 2002, 2003, 2007, 2010, Microsoft Outlook Express, Windows Mail, and Windows Live. E-mail backup is a subset of file-level backups that backs up predefined folders and requires minimum user selections. However, if need be, you can select Microsoft Outlook components and folders individually.



You can select the following items:

- Messages contained in .PST/.DBX Database Files
- E-mail accounts

For Microsoft Office Outlook 2000, 2002, 2003, 2007, 2010

- Mail Folders
- Calendar
- Contacts
- Tasks
- Notes
- Signatures
- News Folders

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- User Settings
- Address Book

For Microsoft Outlook Express

- Mail Folders
- Address Book (select **Windows Address Book**).

Acronis True Image Home 2011 provides backup of IMAP (Internet Messages Access Protocol) mail folders for Microsoft Outlook. This means that you can back up folders stored on a mail server. For Microsoft Outlook Express and Windows Mail only backup of local e-mail folders is available.

Take note that Acronis True Image Home 2011 does not support Unicode characters in the items backed up using the **E-mail backup** type.

To back up your E-mail:

1. Click **E-mail backup** on the main screen. This will open the **E-mail Backup** window.
2. Select the mail items you want to back up in the **What to back up** area. The right side will show the item contents with all subitems selected. There you can unselect the subitems you do not need to back up, if any.
3. Select a destination for backup (you can leave the default destination or browse for a destination after clicking the down arrow to the right of the current destination and selecting **Browse...**).
4. The program will assign a default name to the backup, but if you would like to assign another name, type the name in the **Backup name** field.
5. Click the **Back up now** button if you want to run backup immediately. You can also delay the start of backup for up to 6 hours by clicking the down arrow to the right of this button and selecting a delay interval from the dropdown list.

When you need to change the default backup options, click **E-mail backup options** and set the options as required. You can also change the default backup scheme by clicking on the appropriate link. For more information see Backup schemes (p. 53).

If you want to run the backup on a schedule, click the **Turn on** link to set up a schedule (for more information see Scheduling (p. 139)). To run the backup on the schedule, click the down arrow to the right of the **Back up now** button and select **Later** in the drop down list. The backup where you have made the settings will run according to the schedule. You can also start the backup manually later on the main screen.

Note that if you configure a scheduled e-mail backup, you will have to specify your Windows account name and password. This is done for confidentiality reasons. The program will back up only the e-mail messages and settings related to the specified account. E-mail data of all other accounts will not be backed up.

3.6 Using Acronis Nonstop Backup

Acronis Nonstop Backup provides easy protection of your disks and files. It allows you to recover entire disks, individual files and their different versions.

The main purpose of Acronis Nonstop Backup is continuous protection of your data (files, folders, contacts, etc.), though you can use it to protect partitions as well. If you choose to protect an entire partition, you will be able to recover the partition as a whole using the image recovery procedure.

You cannot use Acronis Nonstop Backup for protecting data on external hard drives.

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How it works

Once you start Acronis Nonstop Backup, the program will perform an initial full backup of the data selected for protection. Acronis Nonstop Backup will then save changes in the protected files (including open ones) every five minutes, so that you will be able to recover your system to an exact point in time.

Usually the different states of the protected data will be backed up at 5-minute intervals for 24 hours.

The older backups will be consolidated in such a way that Acronis True Image Home 2011 will keep daily backups for the last 30 days and weekly backups until all Nonstop Backup data destination space is used.

Note, that if Acronis Nonstop Backup protects a non-system partition and no changes have occurred for 5 minutes since the last backup, the next scheduled backup will be skipped. Acronis Nonstop Backup will wait for a significant data change and will create a new incremental backup only when such change has been detected. In those cases, the actual time interval will exceed 5 minutes. In addition, if, for instance, you are working in Word and do not use the "Save" operation for an hour, changes in the Word document will not be backed up every five minutes, because Acronis True Image Home 2011 checks file changes on the disk and not in the memory.

The consolidation will be performed every day between midnight and 01:00 AM. The first consolidation will take place after the Nonstop Backup has been working for at least 24 hours. For example, you have turned on the Nonstop Backup at 10:00 AM on July 12. In this case the first consolidation will be performed between 00:00 and 01:00 AM on July 14. Then the program will consolidate the data every day at the same time. If your computer is turned off between 00:00 and 01:00 AM, the consolidation will start when you turn the computer on. If you turn off Nonstop Backup for some time, the consolidation will start after you turn it on again.

You may think that at these backup rates the storage will fill in no time. Do not worry as Acronis True Image Home 2011 will back up only so called "deltas". This does not mean that entire changed files will be backed up, but only differences between old and new versions. For example, if you use Microsoft Outlook or Windows Mail, your pst file may be very large. Furthermore, it changes with each received or sent E-mail message. Backing up the entire pst file after each change would be an unacceptable waste of your storage space, so Acronis backs up only its changed parts in addition to the initially backed up file.

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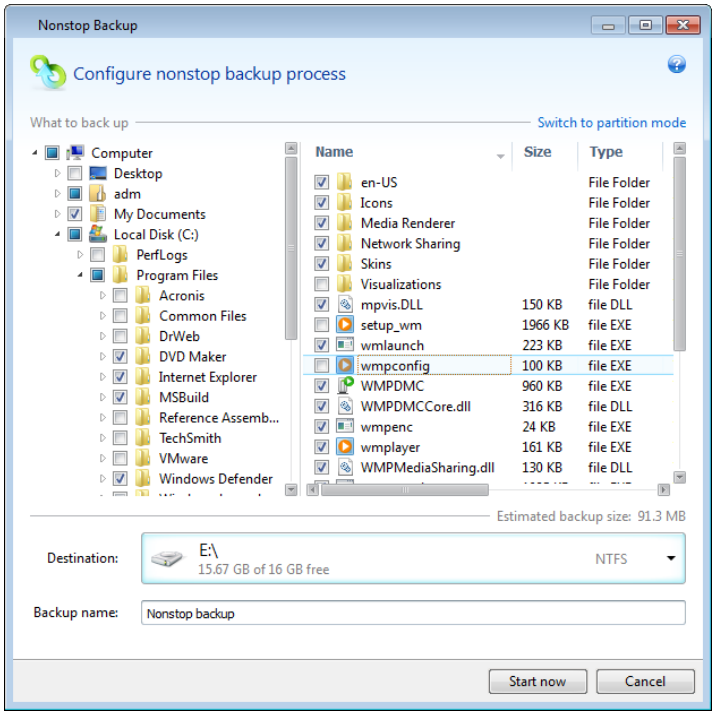
3.6.1 Protecting your data continuously

Let's consider how you can use Nonstop Backup for protecting your data.



To protect your data continuously:

1. Click **Nonstop Backup** on the main screen. This will open the **Nonstop Backup** window.
2. Select on the directory tree in the **What to back up** area an item to be protected by Nonstop Backup. The right side will show the item contents with all the files and subfolders selected. There you can unselect the files you do not need to protect. If you need to protect more items, just continue selecting items on the directory tree in the same way.
3. Select a destination for nonstop backup (you can leave the default destination or browse for a destination after clicking on the current destination and selecting a suitable destination from the dropdown list). For more information on selecting and managing Nonstop Backup storage see Acronis Nonstop Backup storage (p. 48).
4. The Nonstop Backup will get a default name, but if you would like to assign another name, type the name in the **Backup name** field.
5. Click the **Start now** button to start protecting the selected data immediately.

*Nonstop Backup and Try&Decide cannot work simultaneously. If you click the **Start now** button when the Try mode is turned on, the program will display a message that Nonstop Backup cannot start while you are working in the Try mode. To start Nonstop Backup, you will need to finish a Try&Decide session.*

You can exclude from protection files that match the criteria you specify. To add exclusion criteria, click the **Add** link to the right of **Exclusions**. While adding criteria, you can use the common Windows wildcard characters. For more information see Excluding items from backup (p. 51).

Incidentally, you can change the Nonstop Backup settings any time. To do so, click **Edit Nonstop Backup settings** on the main screen. Save the edited Nonstop Backup settings by clicking the **Save** button and Nonstop Backup will immediately start working with the new settings. If you have

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changed the Nonstop Backup destination, the program will create a new full backup of the data to be protected on the new Nonstop Backup storage.

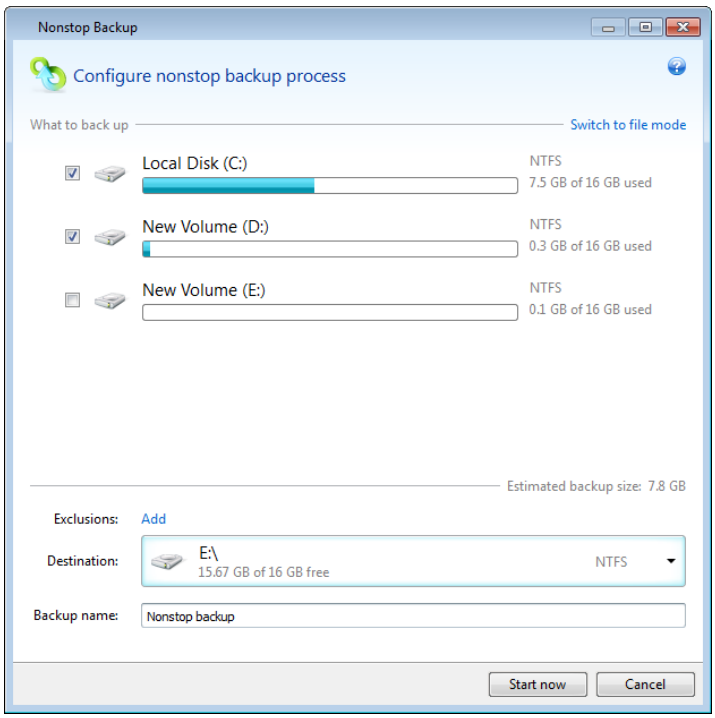
*You can also include files and folders into Nonstop Backup by selecting them in Windows Explorer and choosing **Storages** → **Include in Nonstop Backup** in the shortcut menu that opens by right-clicking on the selected item.*

3.6.2 Protecting your system continuously

You can use Acronis Nonstop Backup for protecting entire system partition as well. If you have sufficient storage space, Acronis Nonstop Backup can simultaneously protect more than one partition.

To protect the system partition continuously:

1. Click **Nonstop Backup** on the main screen. This will open the **Nonstop Backup** window.



2. Click **Switch to partition mode** in the upper right-hand corner of the Nonstop Backup window. The partitions that exist on the local hard disks will appear in the **What to back up** area. Select the system partition by selecting the appropriate check box.
3. Select a destination for nonstop backup (you can leave the default destination or browse for a destination after clicking on the current destination and selecting a suitable destination from the dropdown list).

   You cannot select the partition to be protected as the destination for Nonstop Backup storage.
4. The nonstop backup will get a default name, but if you would like to assign another name, type the name in the **Backup name** field.
5. Click the **Start now** button to start protecting the selected partition(s) immediately.

*Nonstop Backup and Try&Decide cannot work simultaneously. If you click the **Start now** button when the Try mode is turned on, the program will display a message that Nonstop Backup cannot start while you are working in the Try mode. To start Nonstop Backup, you will need to finish a Try&Decide session.*

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You can exclude from protection files that match the criteria you specify. To add exclusion criteria, click the **Add** link to the right of **Exclusions**. While adding criteria, you can use the common Windows wildcard characters. For more information see Excluding items from backup (p. 51).

3.6.3 Acronis Nonstop Backup data storage

Acronis Nonstop Backup data storage can be created only on NTFS formatted local hard disk drives (both internal and external). So you cannot use networked drives and such removable media as Jomega REV drive, etc.

In many cases an external hard disk will be the best choice for Nonstop Backup data storage. You can use an external disk with any of the following interfaces: USB (including USB 3.0), eSATA, FireWire, and SCSI.

Some external hard disk drives are sold formatted FAT32. To use them for storingAcronis Nonstop Backup data, you must reformat them in NTFS.

When an external hard disk is unavailable, the Nonstop Backup destination can be an internal disk, including a dynamic one. Please note that you cannot use as a Nonstop Backup storage a partition to be protected. If your computer has a single hard disk drive with a single partition, but you want to use Acronis Nonstop Backup anyway, you can create Acronis Secure Zone and use it as the Nonstop Backup data storage.

Before creating Acronis Nonstop Backup data storage, Acronis True Image Home 2011 checks whether the selected destination has enough free space. It multiplies the volume of data to be protected by 1.2. If the free space on the destination satisfies this minimum storage size criterion, the destination can be used for storing Nonstop Backup data.

Managing Acronis Nonstop Backup data storage

Inevitably the Acronis Nonstop Backup data storage becomes full after a period of time which depends on the selected Nonstop Backup destination and the volume and composition of the data protected by Acronis Nonstop Backup.

When the free space on the storage becomes less than 200 MB, the program will alert you. You can choose another destination without losing the previously backed up data. You will be able to recover the data backed up on the old storage. Note that after selecting a new destination, Acronis Nonstop Backup creates a new full backup of the data selected for protection by Nonstop Backup.

One more way of managing the Acronis Nonstop Backup storage is by deleting the backup versions you no longer need. To clean up the storage, select **Operations** → **Clean up...** on the Nonstop Backup box. Acronis True Image Home 2011 displays a window allowing you to select a period of time for deleting the backup versions created during that period. Select the required period and click **OK**. You can also completely clean up the Acronis Nonstop Backup storage by selecting **Operations** → **Delete backup** in the Nonstop Backup box. Be careful, as this operation destroys all data backed up by Acronis Nonstop Backup.

3.7 Making reserve copies of your backups

You can create reserve copies of your backups and save them on the file system, a network drive, or a USB flash drive.

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In addition to enhancing the backed up data security with replication, this feature allows you to copy a set of documents, for example, to a USB stick for working on them at home. So now you can perform a normal backup and copy the same files to a USB stick or any local hard drive. You have the choice of making a reserve copy in the form of regular files in their native format, a zip compressed file, or a tib file (optionally with password protection and encryption). A password-protected reserve copy can be encrypted only if you choose to encrypt the main backup and an encryption key of the same length will be used for encrypting the reserve copy.

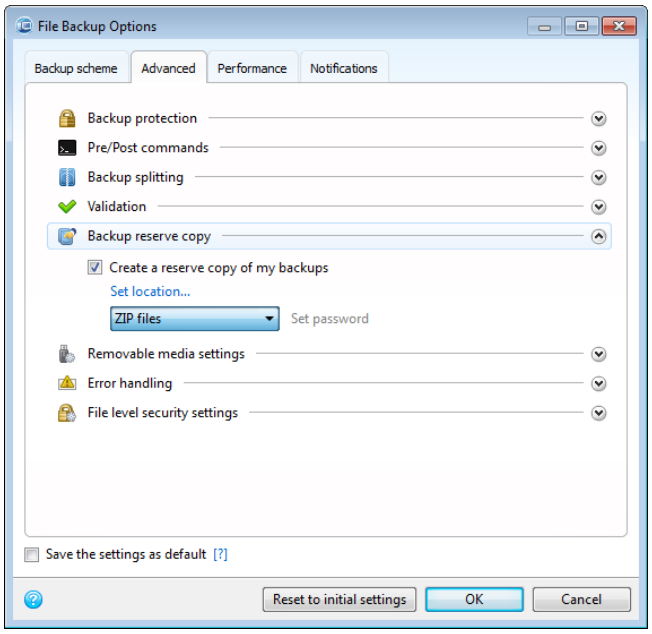
A reserve copy always contains all the files selected for backup, that is, when creating a reserve copy the program always makes a full backup of the source data. You cannot make a reserve copy in the form of an incremental or differential backup, even in tib format.

Also remember that you will pay for the enhanced convenience and increased security of your data by the time required for performing the operation, because normal backup and reserve copying are performed one after another and not simultaneously.

And now let us consider a case when you may need to make a reserve copy of your backup.

Suppose you have worked hard on an urgent project all day and the deadline is tomorrow morning. You decide to back up the results of the day's work in Acronis Secure Zone and make a reserve copy of the project on a USB stick to finish the project at home. To make a reserve copy:

1. While configuring a backup, click the **File backup options** link, expand the **Backup reserve copy** item and then select the **Create a reserve copy of my backups** box (if it is not selected in the default backup options).



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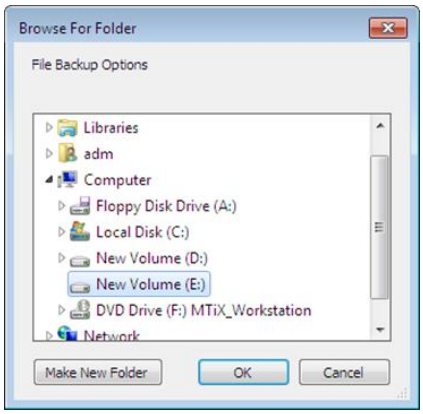
2. Choose how to duplicate the project file(s) on the USB stick. If you need to save space, choose duplicating as a zip file. Click on the **Set location...** link, select the drive letter of the USB stick and create a folder for a reserve copy by clicking on the **Make New Folder** button.



3. Finish configuring your backup as usual.
4. Click **Back up now** and do not forget to take the USB stick home.

Please be aware that built-in support of zip files in Windows does not cover operations with multivolume zip archives, and zip archives exceeding 4GB in size or which contain files of more than 4 GB each. Also remember that CD/DVDs are not supported as locations for reserve copies.

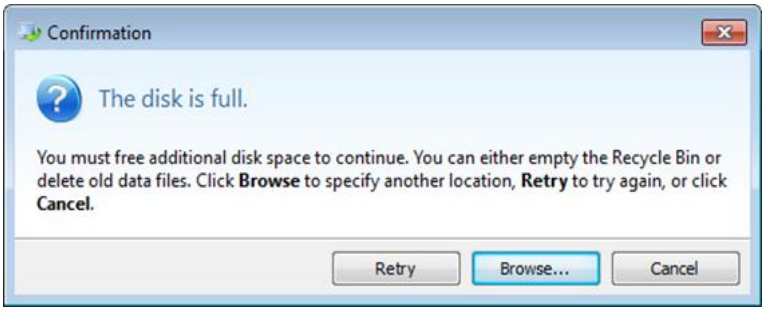
3.8 Backup to various places

Acronis True Image Home 2011 offers you flexibility in choosing destinations for your backups. You can save full, incremental and differential backup versions to different places including a network share, CD/DVD, USB stick, as well as any local internal or external hard drive.

You can save backup versions to different destinations by changing the backup destination when editing the settings of a selected backup. For example, after you save the initial full backup to an external USB hard drive, you can change the backup destination to a USB stick by editing the backup settings. The subsequent incremental or differential backups will be written to the USB stick.

You cannot use Acronis Secure Zone as one of the places for storing a part of backup versions belonging to the same backup "chain", because such backup versions may be automatically deleted during automatic backup consolidation in Acronis Secure Zone. As a result, the backup chain will be corrupted. In addition, the feature does not work with FTP servers.

One more useful aspect of this feature is the ability to split backups "on-the-fly". Suppose you perform a backup to a hard disk and in the middle of the backup process Acronis True Image Home 2011 finds out that the disk to which you are backing up, does not have sufficient free space for completing the backup. The program displays a message warning you that the disk is full.


Confirmation
The disk is full.
You must free additional disk space to continue. You can either empty the Recycle Bin or delete old data files. Click Browse to specify another location, Retry to try again, or click Cancel.
Retry
Browse...
Cancel

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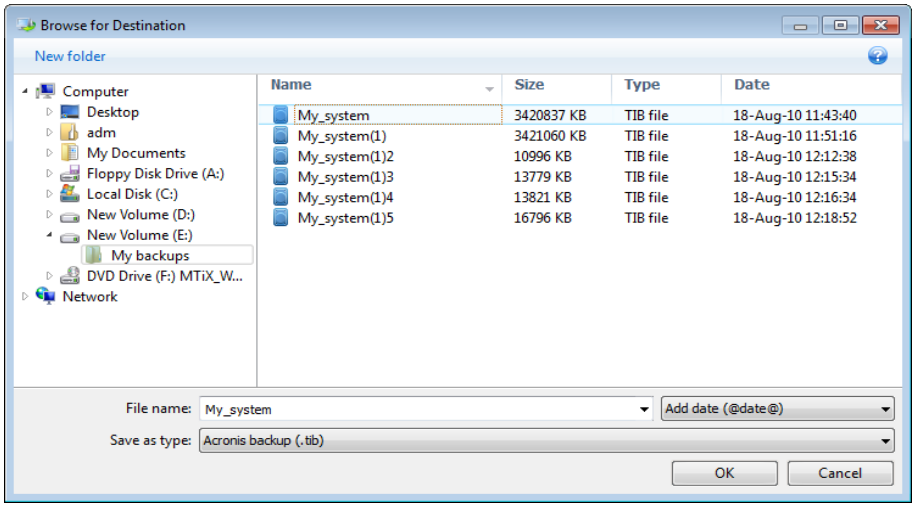
To complete the backup, you may either try to free up some space on the disk and click **Retry** or select another storage device. To choose the latter option, click **Browse...** in the confirmation window. The **Browse for Destination** window appears.



The left pane shows the storage locations available on your computer. After you select a suitable location, assign a name for the file that will contain the remaining data being backed up. You can enter the name manually (for example, "tail_end.tib") or use the file name generator (a button to the right of the line). Then click **OK** and Acronis True Image Home 2011 will complete the backup.

As was already mentioned, you can save full and incremental or differential backup versions to different destinations. For example, you can save the initial full backup to a local hard drive and then burn the subsequent incremental backup versions (or differential backup versions that are an even better choice) to DVDs. It is also possible to save such backup versions to a network share or an FTP server. If backup versions belonging to the same backup "chain" have been saved to various destinations, Acronis True Image Home 2011 may prompt you for the locations of previous backup versions during data recovery. This may occur when the selected backup version does not contain the files you want to recover (or contains only a part of them).

3.9 Adding an existing backup to the list

If you have backups that are not shown in the **My backups** list (for example, backups created by a previous Acronis True Image Home 2011 version), you can add them to the list. Click **Browse for backup** on the main screen. This will open a window where you can browse for backups on your computer.

To add an existing backup to the backup list on the main screen, select the backup and click the **Add to backup list** button.

3.10 Excluding items from backup

If you want to exclude unnecessary files from a backup, specify the appropriate file types in the **File Exclusion** window.

To exclude files, click **What to exclude** in the **Disk Backup**, **File Backup** or **Nonstop Backup** window.

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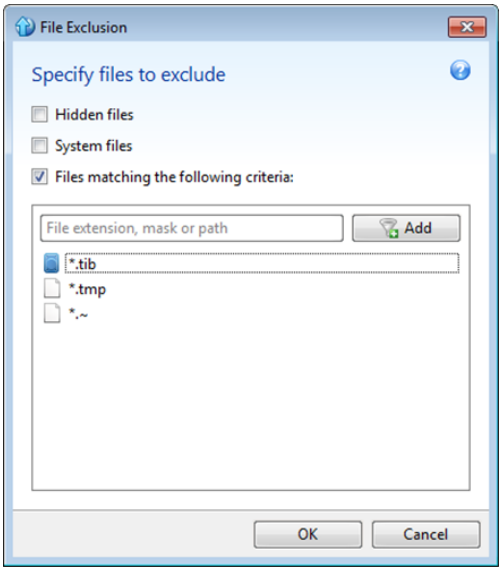
You can exclude hidden and system files from a backup by selecting the corresponding check boxes.



In addition, you can exclude files meeting the criteria you specify. To do this, select the **Files matching the following criteria** check box, enter the exclusion criterion, and then click **Add**.

By default, the program excludes from backups files with the following extensions: **.~**, **.tmp**, and **.tib**.

You can enter explicit file names for exclusion from the backup:

file.ext - all such files will be excluded from the backup.

C:\file.ext- the file.ext file on the C: disk will be excluded.

You can also use wildcards:

***.ext** - all files with a .ext extension will be excluded.

C:*.ext - files located in the root of partition C with a .ext extension will be excluded.

f_name.* - files named f_name with any extension will be excluded.

??name.ext - all files with a .ext extension, having six letters in their names (starting with any two symbols (??) and ending with *name*), will be excluded.

To delete a criterion, for example, added by mistake, click the Delete icon to the right of the criterion.

To cancel changes in the items to be excluded, click **Cancel**.

After you make changes in the items to be excluded, click **OK** to confirm the changes and exit from the **File Exclusion** window.

3.11 Backup options

In the **Disk Backup Options**, **File Backup Options** and **E-mail Backup Options** windows you can configure options for a disk/partition, file and e-mail backup processes respectively. After you have installed the application, all options are set to the initial values. You can change them for your current backup operation only or for all backups that will be created in future. Select the **Save the**

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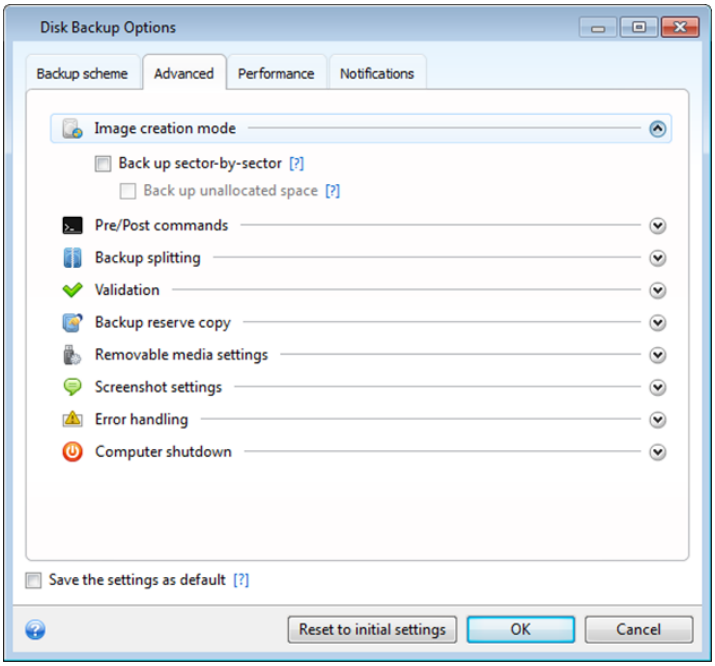
settings as default check box to apply the modified settings to all further backup operations by default.



Note that disk backup options, file backup options and e-mail backup options are fully independent, and you should configure them separately.

If you want to reset all the modified options to their initial values that were set after the product installation, click the **Reset to initial settings** button.

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3.11.1 Backup schemes

Backup schemes along with the scheduler help you to set up your backup strategy. The schemes allow you to optimize backup storage space usage, improve data storage reliability, and automatically delete the obsolete backup versions.

Backup scheme defines the following parameters:

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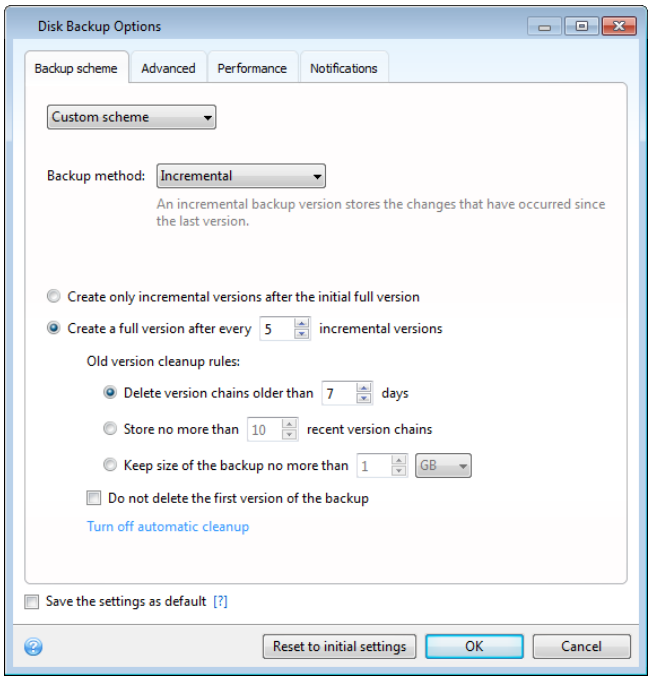
- Backup methods that will be used to create backup versions (full, differential or incremental)
- Sequence of the backup versions created using different methods
- Version cleanup rules



Acronis True Image Home 2011 allows you to choose the following backup schemes:

- **Single version** (p. 54) - select this scheme if you want to use the smallest backup storage, or if you back up data that changes insignificantly.
- **Version chain** (p. 55) - this is the most recommended and optimal scheme.
- **Custom** (p. 55) - select this item if you want to set up a backup scheme manually.

Backup schemes and scheduler

Scheduler settings for the default backup schemes (single version and version chain) are predefined. You should not change the default backup periodicity settings in the scheduler. For disk backups the setting is **Monthly**, and for file backups - **Daily**. If you have selected one of the backup schemes and then change the periodicity settings (for instance, from **Monthly** to **Weekly**), the backup scheme will automatically reset to a custom backup scheme with the incremental method selected. In this case the version chain will consist of a full backup version and a sequence of incremental backup versions.

3.11.1.1 Single version scheme

This backup scheme is the same for both disk backup and file backup types (except scheduler settings).

The program creates a full backup version and overwrites it every time according to the specified schedule or when you run backup manually.

Backup scheduler setting for disk backup: monthly

Backup scheduler setting for file backup: daily

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Result: you have a single up-to-date full backup version

Required storage space: minimal.

3.11.1.2 Version chain scheme

This backup scheme differs for disk backup and file backup types.

Disk backup version chain

At first the program creates the 1st full backup version. The version will be kept until you delete it manually. After that, according to the specified schedule (or when you run backup manually) the program creates: 1 full and 5 differential backup versions, then again 1 full and 5 differential backup versions and so on. The versions will be stored for 6 months. After the period the program analyzes if the oldest backup versions (except the 1st full version) may be deleted. It depends on the minimum number of versions (eight) and version chains consistency. The program deletes the oldest versions one by one after creating new versions with the same backup method (for example, the oldest differential version will be deleted after creation of the newest differential version). First of all the oldest differential versions will be deleted, then - the oldest full version.

Backup scheduler setting: monthly

Result: you have monthly backup versions for the last 6 months plus the initial full backup version that may be kept for a longer period.

Required storage space: depends on the number of versions and their sizes

File backup version chain

According to the specified schedule (or when you run backup manually) the program creates: 1 full and 6 incremental backup versions, then again 1 full and 6 incremental versions and so on. The versions will be stored for 1 month. After the period the program analyzes if the oldest backup versions may be deleted. It depends on the version chain consistency. To keep the consistency, the program deletes the oldest versions by chains "1 full + 6 incremental backup versions" after creating a new analogous version chain.

Backup scheduler setting: daily

Result: you have backup versions for every day of the last month

Required storage space: depends on the number of versions and their sizes

3.11.1.3 Custom scheme

Acronis True Image Home 2011 also allows you to create your own backup scheme. The scheme can be based on creating full, differential or incremental backup versions.

So first of all select one of the backup methods in the appropriate box.

- **Full** (p. 36)
  Select this method if you want to create only full backup versions.
- **Differential** (p. 36)
  Select this method if you want to create backup chains containing only full and differential backup versions.

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You can configure the scheme by using one of the following options:

- **Create only differential versions after the initial full version** - select this item to create only one backup version chain. Automatic cleanup is not available for this option.
- **Create a full version after every [n] differential versions** - select this item to create several backup version chains. This is a more reliable but more space-consuming backup scheme.

- **Incremental** (p. 36)

  Select this method if you want to create backup chains containing only full and incremental backup versions.

  You can configure the scheme by using one of the following options:

  - **Create only incremental versions after the initial full version** - select this item to create only one backup version chain. Automatic cleanup is not available for this option.
  - **Create a full version after every [n] incremental versions** - select this item to create several backup version chains. This is a more reliable but more space-consuming backup scheme.

Automatic cleanup rules

To delete obsolete backup versions automatically, you can set one of the following cleanup rules:

- **Delete versions older than [defined period]** (available for full method only) - Select this option to limit the age of backup versions. All versions that are older than the specified period will be automatically deleted.
- **Delete version chains older than [defined period]** (available for incremental and differential methods only) - Select this option to limit the age of backup version chains. The oldest version chain will be deleted only if, after deletion, the age of the oldest version exceeds the specified period.
- **Store no more than [n] recent versions** (available for full method only) - Select this option to limit the maximum number of backup versions. When the number of versions exceeds the specified value, the oldest backup version will be automatically deleted.
- **Store no more than [n] recent version chains** (available for incremental and differential methods only) - Select this option to limit the maximum number of backup version chains. When the number of version chains exceeds the specified value, the oldest backup version chain will be automatically deleted.
- **Keep size of the backup no more than [defined size]** - Select this option to limit maximum size of the backup. After creating a new backup version, the program checks whether the total backup size exceeds the specified value. If it's true, the oldest backup version will be deleted.

The first backup version option

Often the first version of any backup is one of the most valuable versions. This is true because it stores the initial data state (for example, your system partition with recently installed Windows) or some other stable data state (for example, data after a successful virus check).

Do not delete the first version of the backup - Select this check box to keep the initial data state. The program will create two initial full backup versions. The first version will be excluded from the automatic cleanup, and will be stored until you delete it manually.

If you select incremental or differential method, the first backup chain will start from the second full backup version. And only the third version of the backup will be incremental or differential one.

Note that when the check box is selected, the **Store no more than [n] recent versions** check box will change to **Store no more than 1+[n] recent versions**.

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3.11.2 Image creation mode

You can use these parameters to create an exact copy of your whole partitions or hard disks, and not only the sectors that contain data. Note that the **Back up unallocated space** check box is available only when the **Back up sector-by-sector** check box is selected.

- To make a sector-by-sector backup, check the **Back up sector-by-sector** parameter. By default the program copies only the hard disk sectors that contain data. However, sometimes it might be useful to make a full sector-by-sector backup. For example, you have deleted some files by mistake and want to make a disk image before trying to undelete them, because sometimes undeleting may create problems in the file system. Please note that this mode increases processing time and usually results in a larger image file because it copies used and unused hard disk sectors.
- The **Back up unallocated space** option becomes available if you have selected the previous parameter, **Back up sector-by-sector**. By default, while performing sector-by-sector backup, unallocated space is not included into the backup file. Enabling this option will include all unallocated disk space into the backup.

3.11.3 Backup protection

A backup file can be password-protected. By default, there is no password protection for backups.

To protect the backup:

- Enter the password for the backup into the **Password** field. A password should consist of at least eight symbols and contain both letters (in upper and lower cases preferably) and numbers to make it more difficult to guess.
- Retype the previously entered password into the **Confirm** field
- To increase the security of your confidential data, you can encrypt the backup with strong industry-standard AES (Advanced Encryption Standard) cryptographic algorithm. AES is available with three key lengths – 128, 192 and 256 bits to balance performance and protection as desired.

  The 128-bit encryption key is sufficient for most applications. The longer the key, the more secure your data. However, the 192 and 256-bit long keys significantly slow down the backup process.

  If you want to use AES encryption, choose one of the following keys:

  – **AES 128** - to use 128-bit encryption key

  – **AES 192** - to use 192-bit encryption key

  – **AES 256** - to use 256-bit encryption key

  – If you do not want to encrypt the backup and only want to protect a backup with a password, select **None**.

Having specified the backup protection settings, click **OK**.

If you try to recover data from a password-protected backup, or append an incremental backup to such a backup, the program will ask for the password in a special window, allowing access only to authorized users.

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3.11.4 Pre/Post commands for backup

You can specify commands (or even batch files) that will be automatically executed before and after the backup procedure.

For example, you may want to start/stop certain Windows processes, or check your data before starting backup.

To specify commands (batch files):

- Select a command to be executed before the backup process starts in the **Before backup process** field. To create a new command or select a new batch file click the **Edit** button.
- Select a command to be executed after the backup process ends in the **After backup process** field. To create a new command or select a new batch file click the **Edit** button.

3.11.4.1 Edit user command for backup

You can specify user commands to be executed before or after the backup procedure:

- In the **Command** field, type-in a command or select it from the list. Click **...** to select a batch file.
- In the **Working directory** field, type-in a path for command execution or select it from the list of previously entered paths.
- In the **Arguments** field enter or select command execution arguments from the list.

Disabling the **Do not perform operations until the command execution is complete** parameter (enabled for Pre commands by default), will permit the backup process to run concurrently with your command execution.

The **Abort the operation if the user command fails** (enabled by default) parameter will abort the operation if any errors occur in command execution.

You can test a command you entered by clicking the **Test command** button.

3.11.5 Backup splitting

Sizeable backups can be split into several files that together make up the original backup. A single backup can also be split for burning to removable media.

The default setting - **Automatic**. With this setting, Acronis True Image Home 2011 will act as follows.

When backing up to a hard disk:

- If the selected disk has enough space and its file system allows the estimated file size, the program will create a single backup file.
- If the storage disk has enough space, but its file system does not allow the estimated file size, the program will automatically split the image into several files.
- If you do not have enough space to store the image on your hard disk, the program will warn you and wait for your decision as to how you plan to fix the problem. You can try to free some additional space and continue or click **Back** and select another disk.

When backing up to a CD-R/RW, DVD-R/RW, DVD+R/RW, BD-R/RE:

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- Acronis True Image Home 2011 will ask you to insert a new disk when the previous one is full.

Alternatively, you may select the desired file size from the drop-down list. The backup will then be split into multiple files of the specified size. That comes in handy when backing up to a hard disk with the view to burning the backup to CD-R/RW, DVD-R/RW, DVD+R/RW or BD-R/RE later on.

Creating images directly on CD-R/RW, DVD-R/RW, DVD+R/RW, BD-R/RE might take considerably more time than it would on a hard disk.

3.11.6 Backup validation option

You can specify the additional validation setting: **Validate backup when it is created**.

When this option is enabled, the program will check the integrity of the recently created or supplemented backup version immediately after backup. When setting up a backup of critical data or a disk/partition backup, we strongly recommend that you enable this option in oder to ensure that the backup can be used to recover the lost data.

Regular validation

You can also schedule validation of your backups to ensure that they remain "healthy". By default regular validation is turned on with the following settings:

- Frequency: once a month
- Day: the date when the backup was started
- Time: the moment of backup start plus 15 minutes
- Advanced settings: the **Run the validation only when the computer is idle** check box is selected

Example: You start a backup operation on July 15, at 12.00. The backup version is created at 12.05. Its validation will run at 12.15 if your computer is in the "screen saver" state at the moment. If not, then the validation will not run. In a month, August 15, at 12.15, the validation will start again. As before, your computer must be in the "screen saver" state. The same will occur on September 15, and so on.

You can change the default settings and specify your own schedule. This may be useful if you set a custom backup scheme with incremental backups. For example, you may want to schedule validation of all backup versions (the initial full backup version and subsequent incremental backup versions) once a week.

For more information see Scheduling (p. 139).

3.11.7 Backup reserve copy

You can create reserve copies of your backups and save them on the file system, a network drive, or a USB flash drive.

To make a reserve copy:

- Select the **Create a reserve copy of my backups** check box
- Click **Set location...** and specify a location for the backup copies
- Choose one of the reserving methods:
  - duplicate the backups as tib files

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- make reserve copies as zip archives
- copy the files and/or folders to a specified location "as is"

If you choose reserve copies to be made in the tib format, all backup options (such as backup compression, backup splitting, etc.) will be inherited from the source backup. You can also protect the tib backup reserve copy with a password. To do so, click **Set password** and specify a password for the reserve copy.

A reserve copy always contains all the files selected for backup, that is, when creating a reserve copy the program always makes a full backup of the source data. You cannot make a reserve copy in the form of an incremental or differential backup even in tib format.

Also remember that you will pay for the enhanced convenience and increased security of your data by the time required for performing the backup because normal backup and reserve copying are performed one at a time and not simultaneously.

Please, be aware that built-in support of zip files in Windows does not cover operations with multivolume zip archives, and with zip archives exceeding 4GB in size or which contain files of more than 4GB each. Also remember that CD/DVDs are not supported as locations for zip archives, so you will not be able to create reserve backup copies on such a media using the zip file format.

3.11.8 Removable media settings

When backing up to removable media, you can make this media bootable by writing additional components to it. Thus, you will not need a separate bootable disk.

The following settings are available:

- **Place Acronis True Image Home 2011 (Full version) on media**

  Acronis True Image Home 2011 (Full version) - includes support of USB, PC Card (formerly PCMCIA) and SCSI interfaces along with the storage devices connected via them, and therefore is strongly recommended.
- **Place Acronis System Report on media**

  Acronis System Report - the component allows you to generate system report that is used for collecting information about your system in case of any program problem. Report generation will be available before you start Acronis True Image Home 2011 from the bootable media. The generated system report can be saved to a USB flash drive.
- **Place Acronis One-Click Restore on media**

  Acronis One-Click Restore is a minimal addition to your bootable media, allowing one-click data recovery from an image backup stored on this media. This means that when booting from the media and after clicking **Recover**, all data will be silently recovered to its original place. No options or selections such as resizing partitions will be possible.

Acronis One-Click Restore can be added to the media only when creating a full backup of an entire hard disk. It cannot be added when creating an incremental or differential backup, as well as backup of a partition. In such case the Place Acronis One-Click Restore on media check box will not be present on the General tab of the current backup options, even if the box is selected in the default Removable media settings.

- **Ask for first media while creating backups on removable media**

  You can choose whether to display the Insert First Media prompt when backing up to removable media. With the default setting, backing up to removable media may not be possible if the user is away, because the program will wait for someone to press OK in the prompt box. Therefore, you

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should disable the prompt when scheduling a backup to removable media. Then, if the removable media is available (for example, CD-R/RW inserted) the backup can run unattended.

If you have other Acronis products installed on your computer, the bootable versions of these programs' components will be offered as well.

3.11.9 Screenshot settings

Along with backup comments, screenshots help you to recognize a previous data state you need to recover. Acronis True Image Home 2011 allows you to take screenshots at the moment of starting a disk or partition backup. To enable the option, select the **Take screenshot upon a disk backup start** check box. The screenshots will be shown in Backup Explorer on the **Disks and partitions** tab. Every screenshot corresponds to its own disk backup version. Thus, switching between the backup versions on the time line, you will see different screenshots and will be able to find the required backup version faster.

3.11.10 Error handling

When the program encountered an error while performing backup, it stops the backup process and displays a message, waiting for a response on how to handle the error. If you set an error handling policy, the program will not stop the backup process and warn you about an error with a message, but will simply handle the error according to the set rules and continue working.

You can set the following error handling policy:

- **Do not show messages and dialogs while processing (silent mode)** (the preset is disabled) - You can enable this setting to ignore errors during backup operations. This feature was mainly designed for unattended backups when you cannot control the backup process. In this mode no notifications will be displayed to you if errors occur during backup. Instead you can view the detailed log of all operations after the backup process finishes.
- **Ignore bad sectors** (the preset is disabled) - This option is present only for disk and partition backups. It lets you run a backup even if there are bad sectors on the hard disk. Although most disks do not have bad sectors, the possibility that they might occur increases during the course of the hard disk's lifetime. If your hard drive has started making strange noises (for example, it starts making quite loud clicking or grinding noises during operation), such noises may mean that the hard drive is failing. When the hard drive completely fails, you can lose important data, so it is high time to back up the drive as soon as possible. There may be a problem though – the failing hard drive might already have bad sectors. If the **Ignore bad sectors** check box is left unselected, a backup is aborted in case of read and/or write errors that could occur on the bad sectors. Selecting this box lets you run a backup even if there are bad sectors on the hard disk ensuring that you save as much information from the hard drive as possible.
- **When not enough space in ASZ, delete the oldest backup** (the preset is enabled) - When this setting is disabled and there is not enough space in the Acronis Secure Zone for the backup file being created, the program will display a dialog warning you that the zone is full and will require your action. The backup is suspended until you take a desired action and this makes unattended backups impossible. The dialog opens even when the **Do not show messages and dialogs while processing (silent mode)** setting is enabled. So it is advisable to select the **When not enough space in ASZ, delete the oldest backup** check box when planning unattended scheduled backups to the Acronis Secure Zone.

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3.11.11 Computer shutdown

If you know that the backup process you are configuring may take a long time, you may select the **Shut down the computer after the backup is complete** check box. In this case, you will not have to wait until the operation completion. The program will perform the backup and turn off your computer automatically.

This option is also useful when you schedule your backups. For example, you may want to perform backups every weekday in the evening to save all your work. Schedule the backup and select the check box. After that you may leave your computer when you finish your work knowing that the critical data will be backed up and the computer will be turned off.

3.11.12 File-level security settings for backup

You can specify security settings for backed up files (these settings relate only to file/folder backups):

- **Preserve file security settings in backups** - selecting this option will preserve all the security properties (permissions assigned to groups or users) of the backup files for further recovery.

  By default, files and folders are saved in the backup with their original Windows security settings (i.e. permissions for read, write, execute and so on for each user or user group, set in file **Properties** → **Security**). If you recover a secured file/folder on a computer without the user specified in the permissions, you may not be able to read or modify this file.

  To eliminate this kind of problem, you can disable preserving file security settings in backups. Then the recovered files/folders will always inherit the permissions from the folder to which they are recovered (parent folder or disk, if recovered to the root).

  Or, you can disable file security settings during recovery, even if they are available in the backup. The result will be the same.
- **In backups, store encrypted files in a decrypted state** (the preset is disabled) - check the option if there are encrypted files in the backup and you want them to be accessed by any user after recovery. Otherwise, only the user who encrypted the files/folders will be able to read them. Decryption may also be useful if you are going to recover encrypted files on another computer.

  If you do not use the encryption feature available in Windows XP and later operating systems, simply ignore this option. (Files/folders encryption is set in **Properties** → **General** → **Advanced Attributes** → **Encrypt contents to secure data**).

These options relate only to file/folder backups. In addition, they are unavailable for zip backups.

3.11.13 Performance of backup operation

On the **Performance** tab you can configure the following settings:

Compression level

You can choose the compression level for a backup:

- **None** - the data will be copied without any compression, which may significantly increase the backup file size.
- **Normal** - the recommended data compression level (set by default).
- **High** - higher backup file compression level, takes more time to create a backup.
- **Maximum** - maximum backup compression, but takes a long time to create a backup.

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The optimal data compression level depends on the type of files stored in the backup. For example, even maximum compression will not significantly reduce the backup size, if the backup contains essentially compressed files, like .jpg, .pdf or .mp3.

Operation priority

Changing the priority of a backup or recovery process can make it run faster or slower (depending on whether you raise or lower the priority), but it can also adversely affect the performance of other running programs. The priority of any process running in a system, determines the amount of CPU usage and system resources allocated to that process. Decreasing the operation priority will free more resources for other CPU tasks. Increasing backup or recovery priority may speed up the process by taking resources from the other currently running processes. The effect will depend on total CPU usage and other factors.

You can set up the operation priority:

- **Low** (enabled by default) - the backup or recovery process will run slower, but the performance of other programs will be increased.
- **Normal** - the backup or recovery process will have the equal priority with other processes.
- **High** - the backup or recovery process will run faster, but the performance of other programs will be reduced. Be aware that selecting this option may result in 100% CPU usage by Acronis True Image Home 2011.

Network connection speed

If you frequently back up data to network drives or FTP, think of limiting the network bandwidth used by Acronis True Image Home 2011.

You can specify the network backup data transfer speed by choosing one of the following:

- **Transferring speed stated as a percent of the highest possible speed** - drag the slider to set the desired limit for transferring backup data.
- **Transferring speed stated in kilobytes per second** - enter the bandwidth limit for transferring backup data in kilobytes per second.

3.11.14 Notifications for backup operation

Sometimes a backup or recovery procedure can last an hour or longer. Acronis True Image Home 2011 can notify you when it is finished via e-mail. The program can also duplicate messages issued during the operation or send you the full operation log after operation completion.

By default all notifications are disabled.

Free disk space threshold

You may want to be notified when the free space on the backup storage becomes less than the specified threshold value. If after starting a backup Acronis True Image Home 2011 finds out that the free space in the selected backup location is already less than the specified value, the program will not begin the actual backup process and will immediately inform you by displaying an appropriate message. The message offers you three choices - to ignore it and proceed with the backup, to browse for another location for the backup or to cancel the backup.

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If the free space becomes less than the specified value while the backup is being run, the program will display the same message and you will have to make the same decisions.

To set the free disk space threshold:

- Select the **Show notification message on insufficient free disk space** check box
- In the **Size** box, type or select a threshold value and select a unit of measure

Acronis True Image Home 2011 can monitor free space on the following storage devices:

- Local hard drives
- USB cards and drives
- Network shares (SMB/NFS)

*The message will not be displayed if the **Do not show messages and dialogs while processing (silent mode)** check box is selected in the **Error handling** settings.*

This option cannot be enabled for FTP servers and CD/DVD drives.

E-mail notification

You can specify an e-mail account that will be used for notifying you of the backup process.

To specify the e-mail settings:

- Select the **Send e-mail notifications about the operation state** check box.
- Enter the e-mail address in the **E-mail address** field. You can enter several e-mail addresses in a semicolon-delimited format.
- Enter the outgoing mail server (SMTP) in the **Outgoing mail server (SMTP)** field.
- Set the port of the outgoing mail server. By default the port is set to 25.
- Enter the user name in the **User name** field.
- Enter the password in the **Password** field.
- If you want the client e-mail program to handle messages according to the set policy, for example, to put messages into the specified folder, specify the subject in the **Subject** field.
- If your Internet service provider requires authorization on the incoming mail server before sending e-mails, select the **Log on to incoming mail server** check box, then enter the name of the POP3 server and set the port of the incoming mail server.
- To check whether your settings are correct, click the **Send test message** button.

Additional notification settings:

- To send a notification concerning process completion, select the **Send notification upon operation's successful completion** check box.
- To send a notification concerning process failure, select the **Send notification upon operation failure** check box.
- To send a notification with operation messages, select the **Send notification when user interaction is required** check box.
- To send a notification with full log of operations, select the **Add full log to the notification** check box.

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3.12 Validating backups

The validation procedure checks whether you will be able to recover data from a particular backup version, so when you select for validation on the time line…

- a full backup version, the program validates the full backup version only.
- a differential backup version, the program validates the initial full backup version and the selected differential backup version.
- an incremental backup version, the program validates the initial full backup, the selected incremental backup version, and the whole chain (if any) of backup versions to the selected incremental backup version. If the chain contains one or more differential backup versions, the program validates (in addition to the initial full backup version and the selected incremental backup version) only the most recent differential backup version in the chain and all subsequent incremental backup versions (if any) between the differential backup version and the selected incremental backup version.

This information can be helpful, for example, when you find out that a backup comprising a full backup version and a chain of incremental ones is corrupted. To troubleshoot the backup, do as follows. First of all validate the full backup version by selecting it on the time line, right-clicking and choosing **Validate** in the shortcut menu. If it is damaged, all the backup chain will be useless. When it is not damaged, proceed to validating incremental backup versions starting from the oldest, until you find the culprit. All incremental backup versions made after the corrupted one will be unusable, but you will be able to recover the data at least from the previous backup versions.

To validate an entire backup:

1. Select the backup to validate, click **Operations** and select **Validate backup**. If the selected backup is password-protected, Acronis True Image Home 2011 will ask for the password in a dialog box.
2. After you enter the correct password the program will start the validation procedure.
3. When the validation is complete, you will see the result in the line below the backup's box. You can cancel validation by clicking **Cancel**.

3.13 Consolidating backup versions

Using consolidation of backup versions, you can create a consistent copy of backup while deleting selected backup versions. This allows you to delete the backup versions you no longer need from any backup without harming that backup.

Consolidation creates a consistent copy of the backup that does not contain deleted backup versions. If you select a new location for the consolidated backup, the source backup stays as is unless you delete it. This requires more disk space but ensures security of the backup in case the consolidation fails because of power failure or a lack of disk space.

The current Acronis True Image Home 2011 version does not support consolidation of backups created in the zip format.

Acronis True Image Home 2011 cannot consolidate backup versions created when "editing" partition images mounted in the Read/Write mode.

To consolidate backup versions in a backup:

- Select a backup for consolidation on the main screen
- Click **Operations** on the selected backup's box and select **More** → **Consolidate versions**

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- Follow the wizard's steps

You cannot choose another location when consolidating backup versions located in the Acronis Secure Zone.

3.13.1 Archive to consolidate protection

The archive you chose is password-protected in order to prevent it from unauthorized access. You need to specify the previously entered password to obtain access to the archive.

To specify the password:

- Type-in the password in the **Password** field. If you enter the wrong password, the consolidate archive procedure will not be able to continue.
- Click **OK** to continue.

3.13.2 Backup selection

The **Backup selection** window displays a list of backups belonging to the selected archive with the backup creation date and time (like in the Recovery wizard). The top backup is the full backup; the rest are incremental backups.

To select the backups you want to keep:

- Select the backups you want to keep. The other backups will not be included into the consolidated archive. Information on the selected backup (its name, date of creation, type and comments) is displayed on the right pane of the window.
- Click **Next** to continue.

3.13.3 Result location

Specify the place where you want to save the archive copy and its name. By default, the program suggests the same location and the source archive name. Your original archive will be overwritten.

To specify another location for the consolidated archive:

- Select the **New location** item and click the **Browse** button. Specify the location where you want the consolidated archive to be stored to from the drives tree.

  If required, you can create a new folder in the selected location (by clicking the **Create new folder** button), or delete the unnecessary folder (by clicking the **Delete** button).
- In the **File name** field enter a name for the consolidated archive, or click the **Generate name** button to generate the name automatically.
- If you don't need the original archive, you may delete it by selecting the **Delete the original archive** check box
- Click **Next** to continue.

You cannot choose another location when consolidating backups in an archive located in Acronis Secure Zone.

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3.13.4 Consolidation summary

The summary window contains a list of briefly described operations that Acronis True Image Home 2011 will perform after clicking **Proceed**. If some parameters need to be changed, choose the necessary step in the left part of the window and correct the parameter.

Click the **Proceed** button to start the listed operations.

Click the **Options** button to perform the optional steps.

Click the **Cancel** button to exit the wizard without performing any operations.

3.14 Cloning backup settings

When you already have a backup and you need to create a new backup of the same type (disk, file or e-mail backup), there is no need to configure the backup process from scratch. The program allows you to copy all settings from an existing backup. After that, you only have to slightly correct the copied settings for your new backup and click **Back up now**.

To create a new backup based on an existing backup:

1. On the main screen, find the corresponding backup box, click **Operations**, point to **More**, and then click **Clone backup settings**.

   A new backup box named **Copy of [the initial backup name]** will be created. It will contain the same settings as the "parental" backup.
2. On the cloned backup box, click **Operations**, and then click **Edit backup settings**.
3. Change selection of items to back up. You may modify backup name, destination, and other settings if needed.
4. Click the **Save** button.
5. To create the first backup version, click **Back up now** on the backup box.

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4 Recovering data

The purpose of data backup is to recover backed up data when the original is lost due to hardware failure, fire, theft or accidental deletion of files.

We hope that you backed up your system and data using the backup features provided by Acronis True Image Home 2011. If so, nothing will have been lost.

The following sections describe how to recover disks, partitions, files and folders. In most cases, you will use Acronis Backup Explorer to recover files and folders. For more information see Acronis Backup Explorer (p. 26).

In this section

Recovering your system after a crash 68
Recovering partitions and disks 73
Recovering partitions protected with Acronis Nonstop Backup 75
Recovering more than one partition at once 75
Recovering a disk backup to a different disk under rescue media 76
Recovering data from file-level backups 80
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Acronis Universal Restore 86
How to use Acronis Startup Recovery Manager 87
About recovery of dynamic/GPT disks and volumes 88
Backup protection dialog box 89
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Recovery options 90

4.1 Recovering your system after a crash

When your computer fails to boot, it is advisable to at first try to find the cause using the suggestions given in Trying to determine the crash cause (p. 68). If the crash is caused by corruption of the operating system, use a backup to recover your system. Make the preparations described in Preparing for recovery (p. 69) and then proceed with recovering your system (p. 69).

4.1.1 Trying to determine the crash cause

A system crash can be due to two basic factors. One reason is that your computer will not boot due to a hardware failure. The second reason is that the operating system is corrupted and Windows will not start up.

In the first scenario, it is better to let your service center handle the repairs. However, you may want to perform some routine tests. Check the cables, connectors, power of external devices, etc. Then, restart the computer. The POST (power-on self test) that starts immediately after you turn on your computer, checks your system hardware. If the POST has found a failure, you will need to send the PC for repairs.

If the POST does not reveal a hardware failure, enter BIOS and check whether it recognizes your system hard disk drive. To enter BIOS, press the required key combination (**Del**, **F1**, **Ctrl+Alt+Esc**, **Ctrl+Esc**, or some other, depending on your BIOS) during the POST sequence. Usually the message

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with the required key combination is displayed during the startup test. Pressing this combination takes you to the setup menu. Go to the hard disk autodetection utility which usually comes under "Standard CMOS Setup" or "Advanced CMOS setup". If the utility does not detect the system drive, it has failed and you need to replace the drive.

If the utility correctly detects your system hard disk drive, then the cause of the crash is probably a virus, malware or corruption of a system file required for booting.

If the system drive is healthy, try to recover the system using a backup of your system disk or system partition. Because Windows does not boot, you will have to use Acronis bootable rescue media.

You will also need to use a system disk backup when recovering the system after replacing the damaged hard disk drive.

4.1.2 Preparing for recovery

a) scan the computer for viruses if you suspect that the crash occurred due to a virus or malware attack.

b) test Acronis bootable rescue media (if you have not done this yet). For more information see Testing bootable rescue media (p. 129).

c) boot from the rescue media and validate the backup you want to use for recovery. This is necessary, because there have been user reports that a backup that has been successfully validated in Windows is declared corrupted when being validated in the recovery environment. This may be due to the fact that Acronis True Image Home 2011 uses different device drivers in Windows and in the recovery environment. If Acronis True Image Home 2011 considers the backup corrupted, it will not proceed with recovery.

4.1.3 Recovering your system

Once you have performed the steps described in Preparing for recovery (p. 69), begin the system recovery procedure. Here we will explain how to recover a corrupted system to the same hard disk. System recovery to a replaced hard disk drive will be similar with some minor differences. You do not need to format the new disk, as this will be done in the process of recovery.

Attach the external drive containing the backup to be used for recovery and make sure that the drive is powered on. This must be done before booting from Acronis rescue media.

1. Arrange the boot order in BIOS so as to make your rescue media device (CD, DVD or USB stick) the first boot device. See Arranging boot order in BIOS (p. 89).
2. Boot from the rescue media and select Acronis True Image Home 2011 (Full version).

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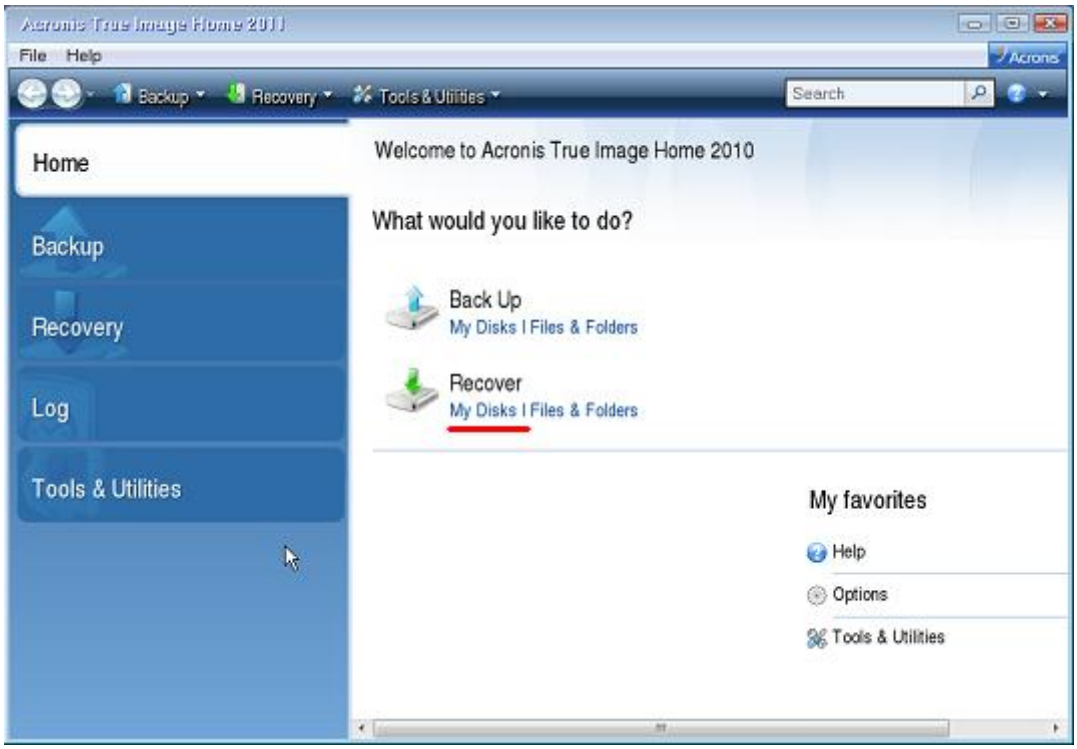
3. Select **My disks** below **Recover** on the Welcome screen.



4. Select the system disk or partition backup image to be used for recovery.

   Right-click on the backup and choose **Recover** in the shortcut menu.

   If Windows and the recovery environment assign different disk letters, the program will display the following error message:

   "Acronis True Image Home 2011 cannot detect volume N of "Name" archive"

   where Name is the name of the required image backup and volume number (N) may be different depending on the number of backups in the archive.

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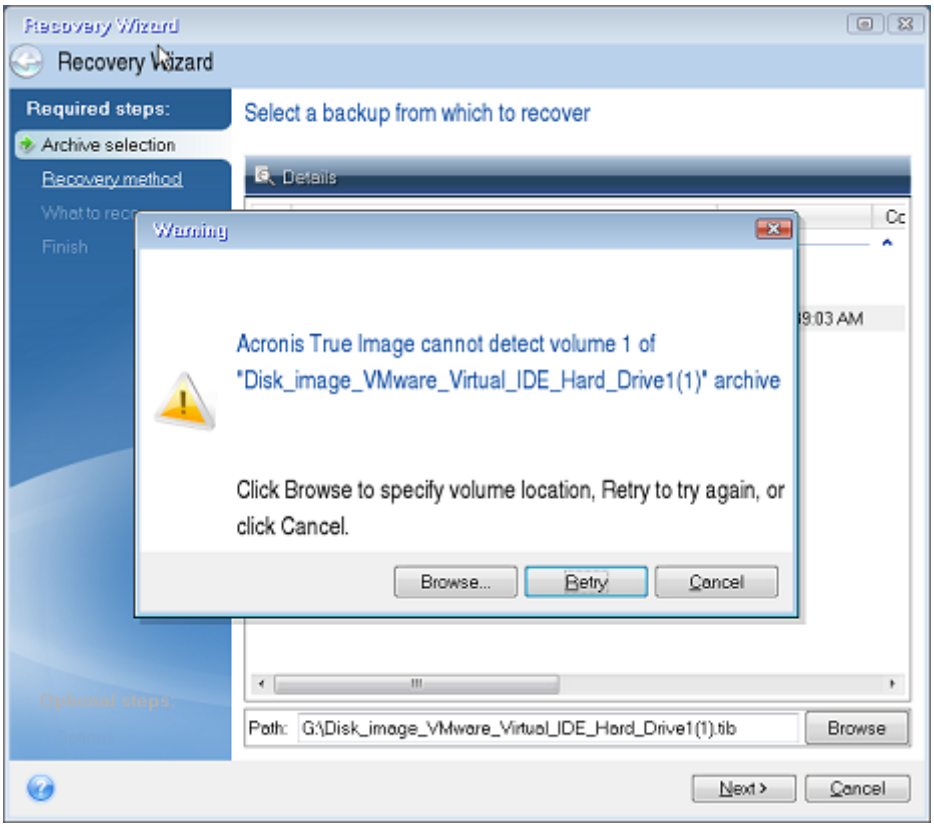
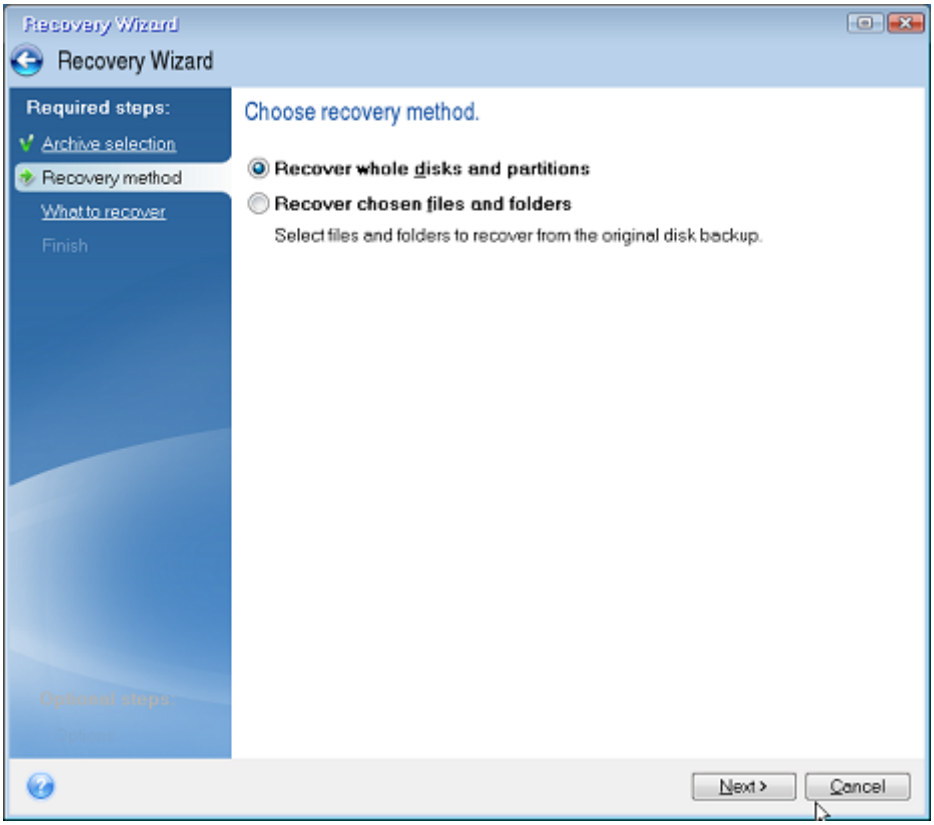
Click **Browse** and show the path to the backup.



5. Select **Recover whole disks and partitions** at the Recovery method step.



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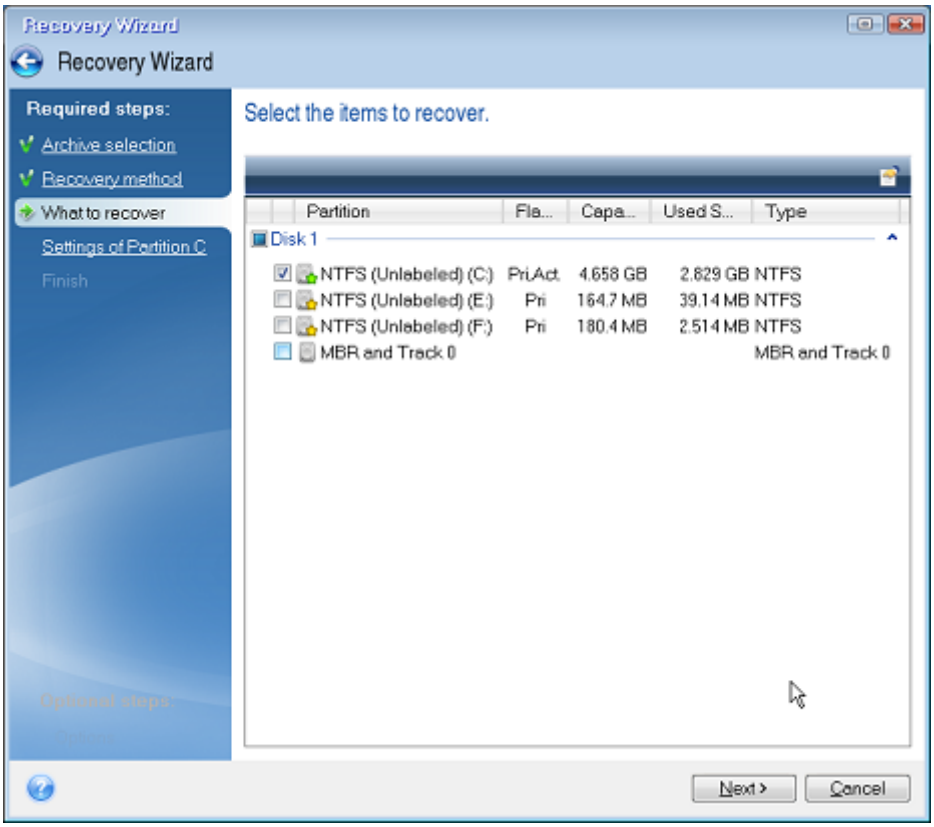
6. Select the system partition (usually C) on the **What to recover** screen. If the system partition has a different letter, select the partition using the **Flags** column. It must have the **Pri**, **Act** flags.



7. At the "Settings of partition C" (or the letter of the system partition, if it is different) step check the default settings and click **Next** if they are correct. Otherwise, change the settings as required before clicking **Next**. Changing the settings will be needed when recovering to the new hard disk of a different capacity.

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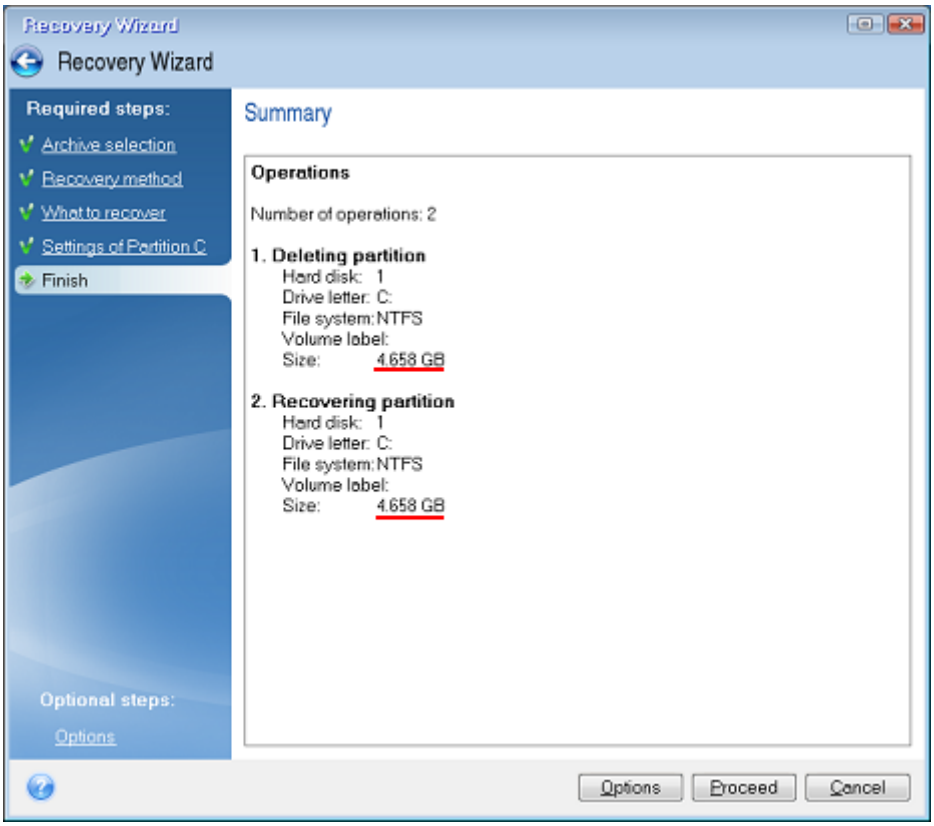
8. Carefully read the summary of operations at the **Finish** step. If you have not resized the partition, the sizes in the **Deleting partition** and **Recovering partition** items must match. Having checked the summary click **Proceed**.



9. When the operation finishes, exit the standalone version of Acronis True Image Home 2011, remove the rescue media and boot from the recovered system partition. After making sure that you have recovered Windows to the state you need, restore the original boot order.

4.2 Recovering partitions and disks

You can start recovering a partition or disk from an image backup both on the main screen and in Acronis Backup Explorer. To start recovery from the main screen, select the box of a backup containing the partition image you need to recover. Click **Recover** or **Recover last version** (if the backup has more than one version). This will open the Disk Recovery window.

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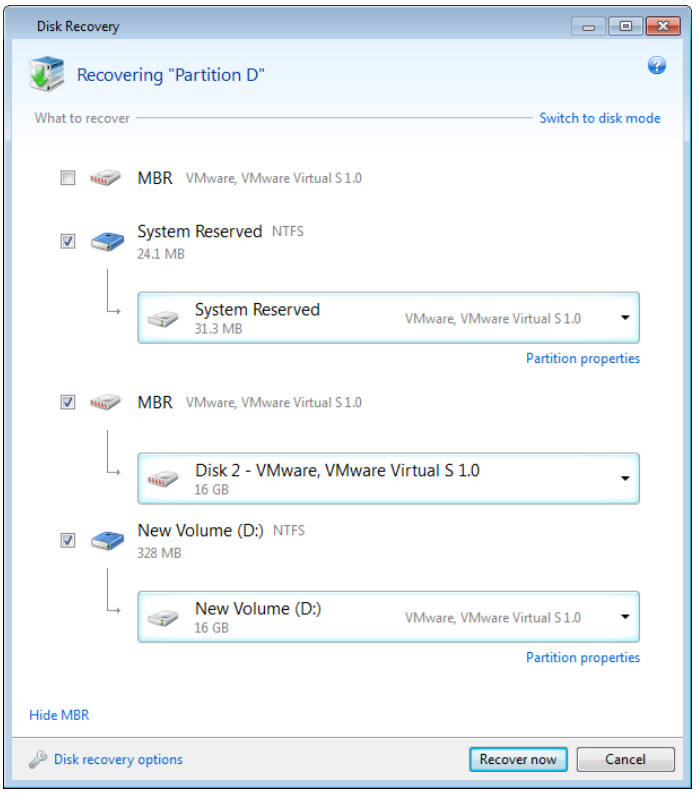
If you want to recover the partition to the state it was at an earlier date, click **Explore and recover** under the **Recover last version** button. This will open Backup Explorer which allows you to select the image backup version created on that date. Clicking **Recover** after selecting the required version will open the Disk Recovery window.



a) Select the corresponding check boxes of the partition(s) to recover.

*If you backed up an entire disk, you can choose to recover the entire disk at once by clicking **Switch to disk mode**. To be able to select partitions again, click **Switch to partition mode**.*

b) In the Choose recovery destination field below the partition name, select the destination partition. Those partitions where the partition to be recovered can fit are marked by black lettering. Unsuitable partitions are marked by red lettering. Note that all data on the destination partition will be lost because it is replaced by the recovered data and file system.

c) After you finish with your selections, click **Recover now** to start recovery.

Sometimes you need to recover the MBR (Master Boot Record). For instance, it may be necessary when Windows does not boot after recovery. To recover the MBR (either together with the partition or individually), select the MBR check box.

If you recover the entire disk, the **Recover disk signature** check box appears. Disk signature is a part of a hard disk MBR. It is used for uniquely identifying the disk media.

We recommend that you select the **Recover disk signature** check box due to the following reasons:

- Acronis True Image Home 2011 creates scheduled backups using the signature of the source hard disk. If you recover the same disk signature, you don't need to re-create or edit the backups created previously.
- Some installed applications use a disk signature for licensing and other purposes.

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We recommend that you clear the **Recover disk signature** check box when:

- You use an image backup not for disaster recovery but for cloning your Windows hard drive to another one.

In this case, Acronis True Image Home 2011 generates a new disk signature for the recovered hard drive, even if you recover to the same drive.

Disk recovery options - click to set up additional parameters for the disk recovery process.

Use Acronis Universal Restore - click to use Acronis Universal Restore technology during recovery.

Using Acronis Universal Restore (provided by separately purchased Acronis True Image Home 2011 Plus Pack) will help you create a bootable system clone on different hardware (for more information see Acronis Universal Restore (p. 86)).

Choose this option when recovering your system disk to a computer with a processor, motherboard or mass storage device that is different from the one in place when the system was originally backed up.

4.3 Recovering partitions protected with Acronis Nonstop Backup

You can recover partitions protected by Acronis Nonstop Backup as follows. Let's first recover a data partition in Windows.

1. Start Acronis True Image Home 2011.
2. Click **Explore and recover** in the Nonstop Backup box on the main screen.
3. Select the backup version you want to recover on the time line at the **Disks and partitions** tab.
4. Select the partition to recover and click **Recover**.
5. The further operations are similar to those performed when recovering data partitions or disks from a "classic" image backup. For further information see Recovering partitions and disks (p. 73).

Depending on the circumstances, recovery of the system partition may be performed both in Windows and after booting from your rescue media (e.g. when Windows does not start). Recovery in Windows is similar to recovery of a data partition. However, you will need to reboot. Usually, it is safer to recover the system partition using the rescue media.

When using the rescue media, the recovery procedure is very similar to the procedure used for recovering the system partition from a "classic" disk or partition backup. The only difference is the Recovery point step which allows you to select the point in time from which you can recover the system partition.

Acronis True Image Home 2011 safe version does not support recovery from Nonstop Backup storages.

4.4 Recovering more than one partition at once

To recover an image of a hard disk containing two or more partitions to another hard disk drive, use the following procedure:

1. Click the **Recover** button on the backup box of a disk containing several partitions.

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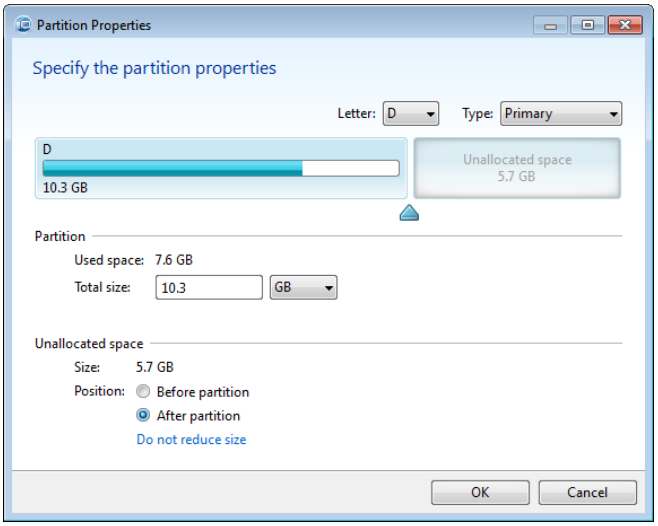
2. Select a partition to recover in the **Disk Recovery** window. This will open the Choose recovery destination field below the partition label.
3. Click the down arrow to the right of the field and select the destination hard disk. The partition to be recovered will then be placed on the selected hard disk. It occupies all the available disk space. To change the partition properties, click the **Partition properties** link below the recovery destination field.
4. To reduce the partition size so as to leave enough disk space for the remaining partitions, click the **Reduce size** link.
5. You can resize the partition by dragging its right border with a mouse on the horizontal bar on the screen. To assign the partition a specific size, enter the appropriate number into the **Total size** field. Remember that you need to leave as much unallocated (free) space after the newly resized partition as will be needed for the remaining partitions. Select a disk letter and partition type. When you finish the settings, click **OK** to confirm them and return to the main Disk Recovery window.

   *You can also place the unallocated space before the partition by selecting the **Before partition** radio button.*



6. Select the next partition's check box.
7. Select the unallocated space on the destination hard disk. The program will create a partition occupying the entire unallocated space.
8. Make the settings for the second partition. Leave enough unallocated space for other partitions to be recovered.
9. Select the next partition, etc.
10. Repeat the above actions until you handle all partitions in the backup.
11. Click **Recover** to recover all partitions to the destination hard disk.

4.5 Recovering a disk backup to a different disk under rescue media

Recovery of a disk backup containing several partitions to a hard disk that has a different capacity is one of the most complicated operations. This is especially true when the original hard disk you have backed up has a hidden diagnostic or recovery partition.

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Complete the preparations described in Preparing for recovery (p. 69).

If you have not already done so, assign unique names (labels) to the partitions of your computer's disks. This will allow for identification of the partitions by their names and not by the disk letters. Disk letters may differ when booting from the rescue media. The names will help you find the drive containing your backups, as well as the target (new) drive.

Information on partition sizes, drive capacities, their manufacturers, and model numbers can also help to correctly identify the drives.

It is highly recommended to install the new hard drive to the same position in the computer and to use the same cable and connector that was used for the original drive. This is not always possible, e.g. the old drive may be an IDE and the new drive may be a SATA. In any case, install the new drive to where it will be used.

4.5.1 Recovering a disk without a hidden partition

At first let's consider recovery of a system disk containing two partitions (none of them hidden). In addition, we assume that the system disk does not contain a recovery partition which may not be hidden. If the disk contains, for example, three partitions, the procedure will be similar. We will describe recovery using the rescue media. This usually gives the best recovery results.

Attach the external drive if it contains the backup to be used for recovery and make sure that the drive is powered on. This must be done before booting from Acronis rescue media.

1. Arrange the boot order in BIOS so as to make your rescue media device (CD, DVD or USB stick) the first boot device. See Arranging boot order in BIOS (p. 89).
2. Boot from the rescue media and select Acronis True Image Home 2011 (Full version).
3. Select **Recovery** → **Disk and Partition Recovery** in the main menu. Choose the image backup of your system disk that you want to use for recovery.

   If the disks have different disk letters in Windows and the recovery environment, the program will display the following error message: "Acronis True Image Home 2011 cannot detect volume N of "Name" archive". Here "Name" is the name of the required image backup. The volume number (N) may be different depending on the number of backup versions in the backup. Click **Browse** and show the path to the backup.
4. Select **Recover whole disks and partitions** at the Recovery method step.
5. At the **What to recover** step, select the boxes which indicate the partitions to be recovered. Do not select the **MBR and Track 0** box, as this will result in selecting the entire disk for recovery. Recovering the entire disk does not allow you to resize partitions manually. In such an event, the new disk space will be proportionally distributed between the recovered partitions. If necessary, you can recover the MBR later. Select the partitions and click **Next**.

   Selecting partitions leads to appearance of the relevant steps "Settings of partition ...".

   Please note that these steps are in ascending partition drive letter order and that this order cannot be changed. The order may differ from the physical order of the partitions on the hard disk.

   In cases involving recovery of non-hidden partitions, the physical order of the partitions on the new disk is not significant. Acronis True Image Home 2011 automatically fixes the appropriate Windows loader files.

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This step allows you to find out whether the disk you are going to recover contains a hidden partition. Hidden partitions do not have disk letters and they go first in the "Settings of partition ..." steps. If you find a hidden partition, see Recovering a disk with a hidden partition (p. 78).

6. You can specify the following partition settings: location, type, and size. Most likely, you will first specify the settings of the system partition as it usually has the letter C. Since you are recovering to the new disk, click **New location**. Select the destination disk by its assigned name or by its capacity.

   If you have not assigned names to the disks and have any doubts about their identity when selecting the destination disk, you may abort the recovery.

   Click **Cancel** and try to identify the destination disk by its model number, interface, etc. To see this information, select **Tools & Utilities** → **Add New Disk** in the main menu. The **Disk selection** screen will show the information. Use it for identifying the destination disk, then click **Cancel**. Start the Recovery Wizard again, repeat the above steps, and select the destination disk.
7. Clicking **Accept** will return you to the "Settings of partition ..." screen. Check the partition type and change it, if necessary. You should remember that the system partition must be primary and marked as active.
8. Proceed to specifying the partition size by clicking **Change default** in the Partition size area. The partition will occupy the entire new disk by default. You can resize and relocate the partition by dragging it or its borders with a mouse on the horizontal bar on the screen. Or you can enter corresponding values into the appropriate fields (Partition size, Free space before, Free space after). Remember that when resizing a partition, you need to leave enough unallocated (free) space for a second partition.

   Usually the free space before partitions is equal to zero. Click **Accept** when the partition is the size you want and then click **Next**.
9. Begin specifying the settings for the second partition. Click **New location** and then select unallocated space on the destination disk that will receive the second partition. Click **Accept**. Check the partition type (change, if necessary). Specify the partition size which by default is equal to the original size. Usually there is no free space after the last partition. Therefore allocate all of the unallocated space to the second partition. Click **Accept** and then click **Next**.
10. Carefully read the summary of operations to be performed. If you do not want to validate the backup, click **Proceed**. Otherwise click **Options** and select the **Validate backup archive before recovery** box before clicking **Proceed**.
11. When the operation finishes, exit the standalone version of Acronis True Image Home 2011.

Windows should not "see" both the new and old drive during the first boot after recovery because this could result in problems booting Windows. If you upgrade the old drive to a larger capacity new one, disconnect the old drive before the first boot.

Switch off the computer, if you need to disconnect the old drive. Otherwise, just reboot the computer after removing the rescue media.

Boot the computer to Windows. It may report that new hardware (the hard drive) has been found and that Windows needs to reboot. After making sure that the system operates normally, restore the original boot order.

4.5.2 Recovering a disk with a hidden partition

A hidden partition may be created by the PC manufacturer for diagnostics or system recovery. Recovering a backup of a system disk with a hidden partition requires that you to take into account some additional factors. First of all, it is necessary for the new drive to keep the physical order of the

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partitions that existed on the old drive. In addition, you should place the hidden partition in the same location - usually at the start or the end of the disk space. To minimize the risk of possible problems, it is better to recover the hidden partition without resizing.

Attach the external drive if it contains the backup to be used for recovery and make sure that the drive is powered on. This must be done before booting from Acronis rescue media.

1. Arrange the boot order in BIOS so as to make your rescue media device (CD, DVD or USB stick) the first boot device. See Arranging boot order in BIOS (p. 89).
2. Boot from the rescue media and select Acronis True Image Home 2011 (Full version).
3. Select **Recovery** → **Disk and Partition Recovery** in the main menu. Choose the image backup of your system disk that you want to use for recovery.

   If the disks have different disk letters in Windows and the recovery environment, the program will display the following error message: "Acronis True Image Home 2011 cannot detect volume N of "Name" archive". Here "Name" is the name of the required image backup. The volume number (N) may be different depending on the number of backup versions in the backup.

   Before continuing with the recovery, you need to know the sizes and physical order of all existing partitions. To see this information, click **Details** on the wizard's toolbar. Acronis True Image Home 2011 will display information about the backed up disk. This includes a graphical view of all partitions the disk contains and their physical order on the disk. If a partition display is too small to accommodate the relevant information, hover the mouse pointer over the partition to see the information.
4. Select **Recover whole disks and partitions** at the Recovery method step.
5. At the **What to recover** step, select the boxes of the partitions to be recovered. Do not select the **MBR and Track 0** box, as this will result in selecting the entire disk for recovery. Recovering the entire disk does not allow you to resize partitions manually. You will be able to recover the MBR later. Select the partitions and click **Next**.

   Selecting partitions leads to appearance of the relevant steps "Settings of partition ...". Note that these steps start with partitions which do not have an assigned disk letter (as usually is the case with hidden partitions). The partitions will then take an ascending order of partition disk letters. This order cannot be changed. The order may differ from the physical order of the partitions on the hard disk.
6. You can specify the following partition settings: location, type, and size. You will first need to specify the settings of the hidden partition as it usually does not have a disk letter. Because you are recovering to the new disk, click **New location**. Select the destination disk by either its assigned name or capacity.

   If you have not assigned names to the disks and have any doubts about their identity when selecting the destination disk, you may abort the recovery. Click **Cancel** and try to identify the target disk by its model number, interface, etc. To see this information, select **Tools & Utilities** ® **Add New Disk** in the main menu. The **Disk selection** screen will show the information. Use it for identifying the destination disk, then click **Cancel**. Start the Recovery Wizard again, repeat the above steps, and select the destination disk.
7. Clicking **Accept** will return you to the "Settings of partition ..." screen. Check the partition type and change it, if necessary.
8. Proceed to specifying the partition size by clicking **Change default** in the Partition size area. By default the partition will occupy the entire new disk. You need to keep the hidden partition size unchanged and place it in the same location on the disk (at the start or the end of disk space). To do this, resize and relocate the partition by dragging it or its borders with a mouse on the horizontal bar on the screen. Or you can enter corresponding values into the appropriate fields

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(Partition size, Free space before, Free space after). Click **Accept** when the partition has the required size and location and then click **Next**.

Specify the settings for the second partition which in this case is your system partition. Click **New location**, and then select unallocated space on the destination disk that will receive the partition. Click **Accept**, check the partition type (change, if necessary). You should remember that the system partition must be primary and marked as active. Specify the partition size which by default equals the original size. Usually there is no free space after the partition, so allocate all the unallocated space on the new disk to the second partition. Click **Accept** and then click **Next**.

9. Carefully read the summary of operations to be performed. If you do not want to validate the backup, click **Proceed**. Otherwise click **Options** and select the **Validate backup archive before recovery** box before clicking **Proceed**.
10. When the operation finishes, proceed to MBR recovery. You need to recover the MBR because the PC manufacturer could change the generic Windows MBR or a sector on the track 0 to provide access to the hidden partition.
11. Reselect the same backup. Then right-click and select **Recover** in the shortcut menu. Choose **Recover whole disks and partitions** at the Recovery method step and then select the **MBR and Track 0** box.
12. At the next step, select the destination disk as the target for MBR recovery, click **Next** and then **Proceed**. After MBR recovery is complete, exit the standalone version of Acronis True Image Home 2011.

Windows should not "see" both the new and old drive during the first boot after recovery because this could result in problems booting Windows. If you upgrade the old drive to a larger capacity new one, disconnect the old drive before the first boot.

Switch off the computer, if you need to disconnect the old drive. Otherwise, just reboot the computer after removing the rescue media.

Boot the computer to Windows. It may report that new hardware (hard drive) is found and Windows needs to reboot. After making sure that the system operates normally, restore the original boot order.

4.6 Recovering data from file-level backups

You will usually start recovering files and folders from Acronis Backup Explorer. When recovering a specific file version, you will start recovery from the **View Versions** window. In either case, starting recovery opens the **File Recovery** window.

Let's consider recovery of files and folders from the Backup Explorer.

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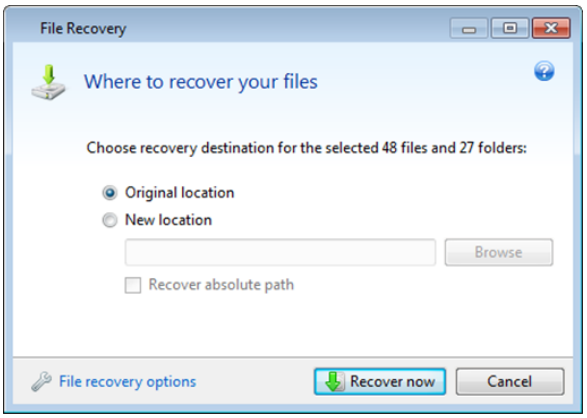
1. Select in the Backup Explorer the files and folders you want to recover. For more information on selection in the Backup Explorer see Files and folders tab (p. 28). Click **Recover** to start recovery. This will open the **File Recovery** window.



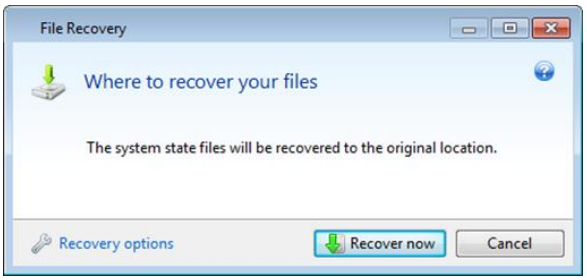
2. Select a destination on your computer to where you want to recover selected files/folders. You can recover data to its original location or choose a new one, if necessary. To choose a new location, click the **Browse...** button.
3. When you choose a new location, the selected items will be recovered by default without recovering the original, absolute path. You may also wish to recover the items with their entire folder hierarchy. In this case select the **Recover absolute path** check box.
4. When needed, set the options for the recovery process (recovery process priority, file-level security settings, etc.). To set the options, click the **File recovery options** link. The options you set here will be applied only to the current recovery operation.
5. To start the recovery process, click the **Recover now** button.
6. The recovery progress will be shown in a special window. You can stop the recovery by clicking **Cancel**. Please keep in mind that the aborted recovery may still cause changes in the destination folder.

How to recover mail, application settings, and system state

This refers to recovering data from your E-mail backups. Application settings and system state can be recovered only from old backups created by an earlier Acronis True Image Home 2011 version, for instance, Acronis True Image Home 2011 2010.

Let's see how you can recover data from e-mail, application settings, and system state backups.

1. Select a required backup version in the Acronis Backup Explorer and click **Recover** to start recovery. This will open the **File Recovery** window.



2. Such data can only be recovered to the original location. Therefore you can only change the recovery options. To change the recovery options, click the **Recovery options** link. The options you set here will be applied only to the current recovery operation.

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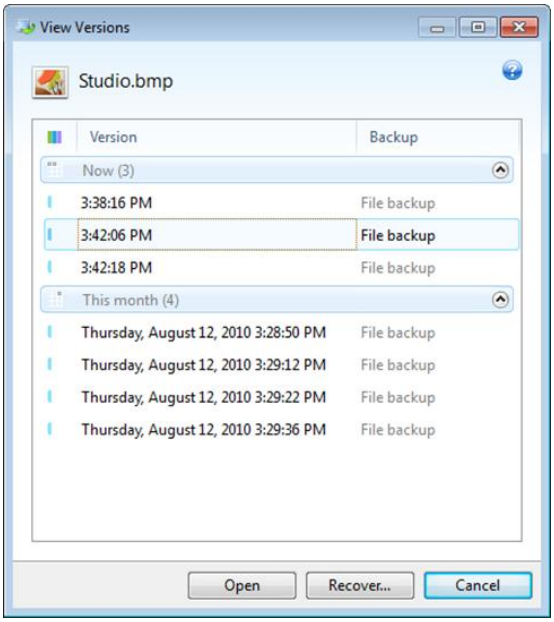
3. To start the recovery process, click the **Recover now** button.
4. The recovery progress will be shown in a special window. You can stop the recovery by clicking **Cancel**. Please keep in mind that the aborted recovery may still cause changes in the original location.

4.7 Recovering file versions

If you need to recover a specific version of a file, select the file in the Backup Explorer. When you select the file, the **View versions** link appears below the file size information. Clicking the link opens the **View Versions** window with a list of all versions of the file in the backup.

You can also select the file in Windows Explorer. Right-click and choose **View versions** in the shortcut menu.

Until you select a file version in the **View Versions** window, the **Open** and **Recover...** buttons remain disabled. Selecting a file version enables the buttons:



Select the required version by its backup time and click the **Recover...** button. This will open the **File Recovery** window. Select the destination and recover the file version to the folder of your choice. For more information see Recovering data from file-level backups (p. 80).

You can also recover the version by dragging it into a selected folder in Windows Explorer.

To choose the correct version, you can open the version in the associated application and view the file contents. Choose the version by its backup time, and then click the **Open** button. Acronis True Image Home 2011 will recover the file version to a temporary folder. Then it will open the file using the associated application.

4.8 Recovering to different hardware

Using Acronis Universal Restore (provided by separately purchased Acronis True Image Home 2011 Plus Pack) will help you create a bootable system clone on different hardware. For more information see Acronis Universal Restore (p. 86). Choose this option when recovering your system disk to a computer with a dissimilar processor, different motherboard or a different mass storage device than

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in the system you originally backed up. This may be useful, for example, after replacing a failed motherboard or when deciding to migrate the system from a desktop to a laptop. You can use Acronis Universal Restore for recovering your system disk both from tib and vhd files.

Acronis Universal Restore is unavailable when recovering the system partition from an Acronis Nonstop Backup.

Before proceeding with recovery, make sure you have drivers for the hard disk drive controller or chipset drivers for the new motherboard. These drivers are critical for booting the operating system. You can download the drivers for your motherboard on the Vendor's web-site. Please note that if you downloaded the drivers in *.exe, *.cab, *.zip format, you should extract them first. The driver files should have *.inf, *.sys or *.oem extensions.

Recovering your system with the help of Acronis Universal Restore

1. Select a backup containing your system partition in the **My Backups** area on the main screen.
2. Click the **Recover** button on the backup's box if the backup consists of a single version. When there are several backup versions, click **Explore and recover**. Select the backup version you want to recover on the **Disks and partitions** tab, and then click **Recover**.
3. When the **Disk Recovery** window opens, select the system partition's check box and choose the recovery destination.
4. Select the **Use Universal Restore** check box. Then click **Settings** to open the Drivers manager window.
5. If the target hardware has a specific mass storage controller (such as an SCSI, RAID, or Fibre Channel adapter) for the hard disk(s), specify where to find the driver(s) for the specific hardware. If the driver(s) is stored on a diskette or CD, select the **Search removable media for device drivers** box. If some drivers are stored on a local hard disk or a network share, click **Add custom driver locations...**. Then, browse to the driver(s) location. After you finish specifying the drivers locations, click **OK**.

   Acronis Universal Restore does not support search for drivers on FTP servers.

   In most cases, Acronis Universal Restore will use three sources for drivers:

   - the removable media;

   - the drivers storage location(s) specified at this step; and

   - the Windows default driver storage folders (in the image being recovered).

   The program will find the most suitable of all available drivers and install them into the recovered system.
6. To start recovery, click the **Recover** button.
7. When a warning appears that you need to reboot the computer to continue the operation, click **Reboot** to continue.

During recovery, the program may be unable to find some driver(s) in the specified sources and will display an error message(s). In this case, you can click **Ignore** to continue recovery or click **Cancel** to cancel the process and then try to find the required driver. You can then continue with the recovery process.

Acronis Universal Restore patches the registry and installs the new drivers after the system is recovered. Therefore, make sure that the driver location will still be available. For example, do not specify the search path for the drivers on the same disk to which you are recovering the backup. We recommend that you place the drivers on a separate USB hard disk, USB flash stick or on a network share.

After successfully recovering the system partition boot to the recovered Windows.

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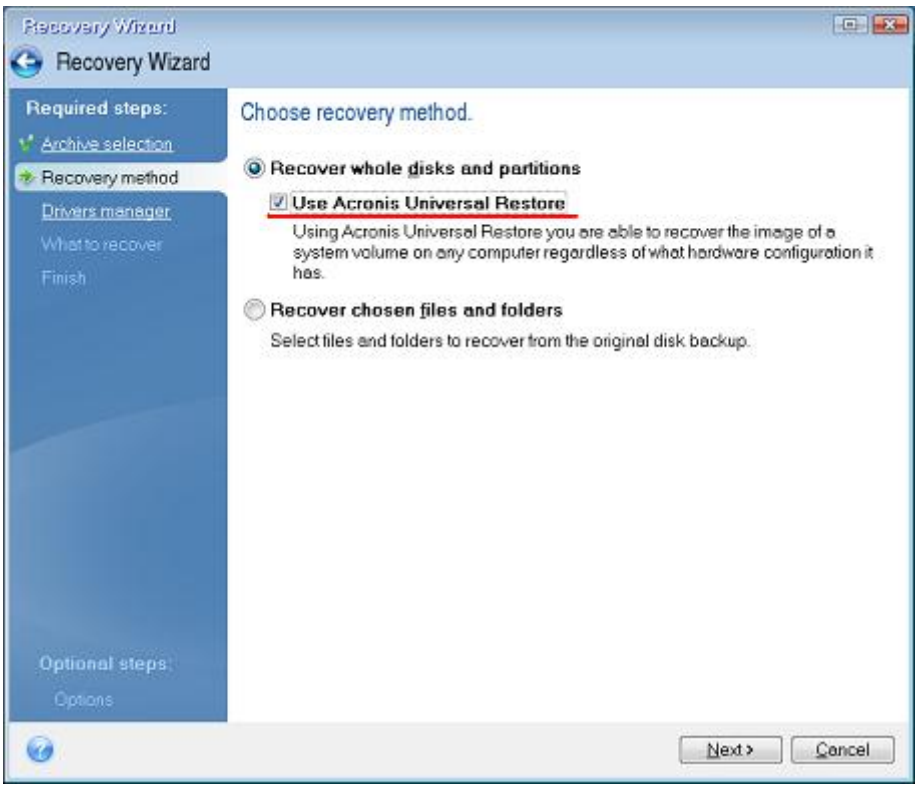
During the first booting, Windows will display numerous "Found new hardware" pop-up messages and will then ask you to reboot the computer.

If you use Acronis Universal Restore for recovering a backup of multiboot configuration with two or more editions of Windows, the most critical drivers will be replaced for all Windows installations.

Recovering your system with the help of Acronis Universal Restore under rescue media

In most cases it is preferable to use your bootable media for system recovery. The rescue media must include Acronis Universal Restore add-on. Therefore, you need to re-create bootable media after installing the Acronis True Image Home 2011 Plus Pack.

1. Make your rescue media the first boot device in BIOS. See Arranging boot order in BIOS (p. 89).
2. Boot from the rescue media and select Acronis True Image Home 2011 (Full version).
3. Click the **My Disks** link below **Recover** on the Welcome screen to start the Recovery Wizard. Then, choose the image of the system disk for recovery. Since drive letters in the standalone Acronis True Image Home 2011 may differ from the way Windows identifies drives, you may need to specify the path to the image file. Click **Browse** and select the disk and folder that stores the image.
4. Choose **Recover whole disks and partitions** and select the **Use Acronis Universal Restore** check box.


Recovery Wizard
Recovery Wizard
Required steps:
Archive selection
Recovery method
Drivers manager
What to recover
Finish
Optional steps:
Options
Choose recovery method.
Recover whole disks and partitions
Use Acronis Universal Restore
Using Acronis Universal Restore you are able to recover the image of a system volume on any computer regardless of what hardware configuration it has.
Recover chosen files and folders
Select files and folders to recover from the original disk backup.
Next >
Cancel

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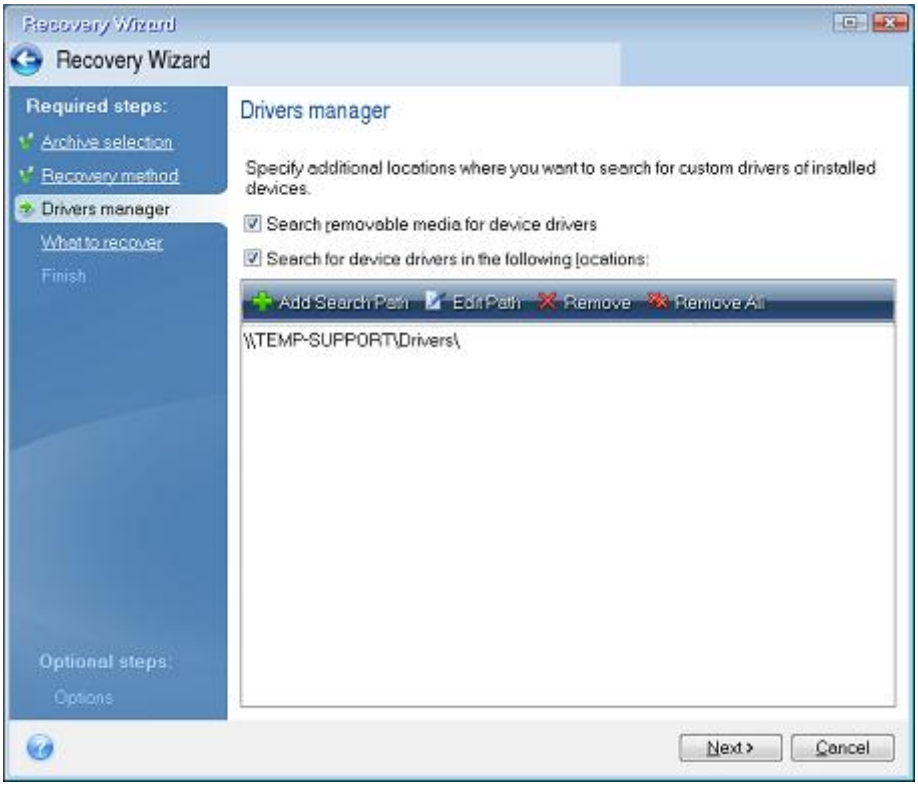
5. If the target hardware has a specific mass storage controller (such as an SCSI, RAID, or Fibre Channel adapter) for the hard disk(s), specify where to find the driver(s) for the specific hardware at the **Drivers manager** step. If the driver(s) is stored on a diskette or CD, select the **Search removable media for device drivers** box. If some drivers are stored on a local hard disk or a network share, select the **Search for device drivers in the following locations** box (when it is not selected by default). Specify the path to the driver(s) after clicking **Add Search Path**.



When both boxes are selected at this step, Acronis Universal Restore will use three sources for drivers:

- the removable media;

- the drivers storage folder(s) specified at this step; and

- the Windows default driver storage folders (in the image being recovered).

The program will find the most suitable of all available drivers and install them into the recovered system.

6. Select the system disk at the **What to recover** step. Then, specify the destination of the disk being recovered (new system disk). At this point the program checks whether the destination disk is free. If not, you will be prompted by the Conformation window stating that the destination disk contains partitions, perhaps with useful data. To confirm deletion of the partitions, click **OK**.
7. Carefully read the summary of operations at the **Finish** step. If you do not want to validate the backup, click **Proceed**. Otherwise click **Options** on the sidebar and select the **Validate backup archive before recovery** box before clicking **Proceed**.

If the capacities of the source (backed up) disk and the destination disk are different, the new disk space will be proportionally distributed between the recovered partitions.

After successfully recovering the system partition, exit Acronis True Image Home 2011. Enter the BIOS, make the system hard disk the first boot device, and boot to the recovered Windows.

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4.9 Acronis Universal Restore

4.9.1 Purpose of Acronis Universal Restore

Universal Restore is part of the Acronis True Image Home 2011 Plus Pack which must be purchased separately. Acronis True Image Home 2011 Plus Pack has its own license and is installed from its own setup file. You need to re-create bootable media in order to make the newly installed Universal Restore add-on operational in the bootable recovery environment.

A system disk image can be restored easily on the hardware where it was created or to identical hardware. However, if you change the motherboard or use another processor version, a likely possibility in case of hardware failure, the recovered system could fail to boot.

Trying to move the system to a new more powerful computer will usually produce the same result. This is because the new hardware is incompatible with critical drivers included in the image.

Microsoft System Preparation Tool (Sysprep) will not resolve this problem. Sysprep allows you to replace only Plug-and-Play device drivers (sound cards, network adapters, video cards etc.).

However, System Hardware Abstraction Layer (HAL) and mass storage device drivers must be identical on both the source and the target computers (see Microsoft Knowledge Base, articles 302577 and 216915).

Acronis Universal Restore technology provides an efficient solution for hardware-independent system restoration by replacing the crucial Hardware Abstraction Layer (HAL) and mass storage device drivers.

Acronis Universal Restore is applicable for:

1. Instant recovery of a failed system on different hardware
2. Hardware-independent cloning of operating systems

4.9.1.1 Limitations in using Acronis Universal Restore

1. The system recovered by Acronis Universal Restore might not start, if the partition structure in the image or the target disk partitioning does not coincide with that of the source disk. The loader restored from the image will point to the wrong partition and the system will not boot or will malfunction.

This may occur if you:

- back up only selected partitions but not the entire source disk
- restore only selected partitions and not the entire source disk. In some cases, especially if your system resides on a partition other than the original one, this can confuse the loader and prevent the restored system from rebooting.

To avoid this problem, we recommend that you back up and recover the entire system disk.

2. The Acronis Universal Restore option does not work if a computer is booted with Acronis Startup Recovery Manager (using F11) or the backup image is located in Acronis Secure Zone. This is because Acronis Startup Recovery Manager and Acronis Secure Zone are primarily meant for data recovery on the same computer.

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4.9.2 General principles of Acronis Universal Restore

1. Automatic selection of HAL and mass storage drivers

Acronis Universal Restore searches the Windows default driver storage folders (in the image being restored) for HAL and mass storage device drivers and installs drivers that best fit the target hardware.

You can specify a custom driver repository (a folder or folders on a network drive or CD) which will also be used to search for drivers. In addition, Acronis Universal Restore can search drivers on removable media.

The Windows default driver storage folder is determined in the registry value "DevicePath", which can be found in the registry key

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\DevicePath. This storage folder is usually WINDOWS/inf.

2. Installing drivers for Plug-and-Play devices Acronis Universal Restore relies on the built-in Plug-and-Play discovery and configuration process to handle hardware differences in devices that are not critical for the system start. This includes video, audio and USB. Windows takes control over this process during the logon phase. If some of the new hardware is not detected, you will have a chance to install the drivers for it later manually.

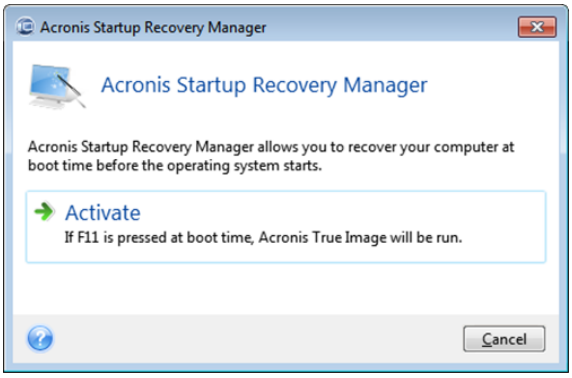
4.10 How to use Acronis Startup Recovery Manager

The Acronis Startup Recovery Manager enables you to start Acronis True Image Home 2011 on a local computer without loading the operating system.

If Windows won't load, this feature allows you to run Acronis True Image Home 2011 by itself to recover damaged partitions.

To be able to use Acronis Startup Recovery Manager at boot time:

- Click **Tools & Utilities** on the menu bar and select **Acronis Startup Recovery Manager**
- Click the **Activate** button


Acronis Startup Recovery Manager
Acronis Startup Recovery Manager
Acronis Startup Recovery Manager allows you to recover your computer at boot time before the operating system starts.
Activate
If F11 is pressed at boot time, Acronis True Image will be run.
Cancel

Attention

When Acronis Startup Recovery Manager is activated, it overwrites the master boot record (MBR) with its own boot code. If you have any third-party boot managers installed, you will have to reactivate them after activating the Startup Recovery Manager. For Linux loaders (e.g. LiLo and

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GRUB), you might consider installing them to a Linux root (or boot) partition boot record instead of an MBR before activating Acronis Startup Recovery Manager.

If a failure occurs, turn on the computer and press F11 when you see the "Press F11 for Acronis Startup Recovery Manager" message. This will start a standalone version of Acronis True Image Home 2011 that differs only slightly from the complete version. Browse for a backup containing an image of your system partition and recover your system.

Disk letters in standalone Acronis True Image Home 2011 might sometimes differ from the way Windows identifies drives. For example, the D: disk identified in the standalone Acronis True Image Home 2011 might correspond to the E: disk in Windows. The disk labels and information on partition sizes, file systems, drive capacities, their manufacturers, and model numbers can help in correctly identifying the disks and partitions.

You won't be able to use the previously activated Acronis Startup Recovery Manager if the Try&Decide is turned on. Rebooting the computer in the Try mode will allow you to use Acronis Startup Recovery Manager again.

4.11 About recovery of dynamic/GPT disks and volumes

1) Acronis True Image Home 2011 supports recovery of dynamic volumes to the following locations on the local hard drives:

- to the original location (to the same dynamic volume)
- to another dynamic disk or volume
- to unallocated space of the dynamic group
- to a basic disk

If a dynamic volume is recovered to an unallocated space of the dynamic group, the recovered volume type will be the same as it was in the backup.

Manual resizing of dynamic volumes during recovery to dynamic disks is not supported. If you need to resize a dynamic volume during recovery, it should be recovered to a basic disk.

When performing a so called "bare-metal recovery" of dynamic volume(s) to a new unformatted disk, the recovered volumes become basic. If you want the recovered volumes to remain dynamic, the target disk(s) should be prepared as dynamic (partitioned and formatted). This can be done using third-party tools, for example, Windows Disk Management snap-in.

2) The target disk's partition style after recovery:

- if a GPT disk image is recovered over a GPT disk; the target disk remains a GPT disk
- if a GPT disk image is recovered over an MBR disk; the target disk remains an MBR disk
- if an MBR disk image is recovered over an MBR disk; the target disk remains an MBR disk
- if an MBR disk image is recovered over a GPT disk; the target disk becomes an MBR disk

Recovery to unallocated space of a GPT disk is not supported.

3) The target volume type does not change when recovering over an existing volume. Examples:

- When recovering a dynamic volume over a basic volume the target volume remains basic
- When recovering a dynamic striped volume over a dynamic spanned volume the target volume remains spanned

4) Recovering a basic volume or disk to the dynamic group:

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- When recovering a basic volume to an unallocated space of the dynamic group, the recovered volume becomes dynamic
- When recovering a basic disk to an unallocated space of a disk in the dynamic group, the disk becomes basic
- When recovering a basic disk to a dynamic disk of a dynamic group consisting of two disks, the recovered disk remains basic and the second disk of a spanned/striped dynamic volume becomes "missing"

4.12 Backup protection dialog box

A backup file can be protected with a password. You can set password protection in backup options while creating a backup.

If you try to recover data from a password-protected backup, mount it or append an incremental backup to such a backup, the program will ask for the password in a special window, allowing access only to authorized users. In this case, you must specify the correct password for the selected backup file. Only then will you be able to proceed with the selected operation.

4.13 Arranging boot order in BIOS

BIOS has a built-in setup utility for initial computer configuration. To enter it, you have to press a certain key combination (**Del, F1, Ctrl+Alt+Esc, Ctrl+Esc**, or some other, depending on your BIOS) during the POST (power-on self test) sequence that starts immediately after you turn your computer on. Usually the message with the required key combination is displayed during the startup test. Pressing this combination takes you to the menu of the setup utility that is included in your BIOS.

The menu can differ in appearance, sets of items and their names, depending on the BIOS manufacturer. The most widely known BIOS makers for PC motherboards are Award/Phoenix and AMI. Moreover, while items in the standard setup menu are mostly the same for various BIOSes, items of the extended (or advanced) setup heavily depend on the computer and BIOS version.

Among other things, the BIOS menu allows you to adjust the **boot order**. **Boot order** management differs for various BIOS versions, e.g. for AMI BIOS, AWARDBIOS, and brand-name hardware manufacturers.

Computer BIOS allows booting operating systems not only from hard disks, but also from CD-ROMs, DVD-ROMs, and other devices. Changing the boot order may be required, for example, to make your rescue media (CD, DVD or USB stick) device the first booting device.

If there are several hard disks installed in your computer labeled as C:, D:, E:, and F:, you can change the boot order so that an operating system is booted from, for example, disk E:. In this case, you have to set the boot order to look like E:, CD-ROM:, A:, C:, D:.

*This does not mean that booting is done from the first device in this list; it only means that the **first attempt** to boot an operating system will be from this device. There may be no operating system on disk E:, or it may be inactive. In this case, BIOS queries the next device in the list.*

The BIOS numbers disks according to the order in which they are connected to IDE controllers (primary master, primary slave, secondary master, secondary slave); next go the SCSI hard disks.

This order is broken if you change the boot order in BIOS setup. If, for example, you specify that booting has to be done from hard disk E:, numbering starts with the hard disk that would be the third in usual circumstances (it is usually the secondary master for IDE hard drives).

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*Some motherboards have a so called boot menu opened by pressing a certain key or key combination, for instance, **F12**. The boot menu allows selecting the boot device from a list of bootable devices without changing the BIOS setup.*

4.14 Recovery options

In the **Disk Recovery Options**, **File Recovery Options** and **E-mail Recovery Options** windows you can configure options for a disk/partition, file and e-mail recovery processes respectively. After you installed the application, all options are set to the initial values. You can change them for your current recovery operation only or for all further recovery operations as well. Select the **Save the settings as default** check box to apply the modified settings to all further recovery operations by default.

Note, that disk recovery options, file recovery options and e-mail recovery options are fully independent, and you should configure them separately.

If you want to reset all the modified options to their initial values that were set after the product installation, click the **Reset to initial settings** button.

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4.14.1 Pre/Post commands for recovery

You can specify commands (or even batch files) that will be automatically executed before and after the recovery procedure.

For example, you may want to start/stop certain Windows processes, or check your data for viruses before recovery.

To specify commands (batch files):

- Select a command to be executed before the recovery process starts in the **Before recovery process** field. To create a new command or select a new batch file click the **Edit** button.
- Select a command to be executed after the recovery process ends in the **After recovery process** field. To create a new command or select a new batch file click the **Edit** button.

4.14.1.1 Edit user command for recovery

You can specify user commands to be executed before or after recovery:

- In the **Command** field type-in a command or select it from the list. Click **...** to select a batch file.
- In the **Working directory** field type-in a path for command execution or select it from the list of previously entered paths.

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- In the **Arguments** field enter or select command execution arguments from the list.

Disabling the **Do not perform operations until the command execution is complete** parameter (enabled by default), will permit the recovery process to run concurrently with your command execution.

The **Abort the operation if the user command fails** (enabled by default) parameter will abort the operation if any errors occur in command execution.

You can test the command you entered by clicking the **Test command** button.

4.14.2 Validation option

- **Validate backup before recovery**

  The preset is **disabled**.

  Before data is recovered from the backup, Acronis True Image Home 2011 can check its integrity. If you suspect that the backup might have been corrupted, enable this option.

- **Check the file system after recovery**

  The preset is **disabled**.

  Having recovered a partition from an image, Acronis True Image Home 2011 can check the integrity of the file system. To do so, enable this option.

Limitations on use of this option:

- Check of the file system is available only when recovering partitions using FAT16/32 and NTFS file systems.
- The file system will not be checked if a reboot is required during recovery, for example, when recovering the system partition to its original place.

4.14.3 Computer restart

The preset is **Disabled**.

If you want the computer to reboot automatically when it is required for recovery, select the **Restart the computer automatically if needed for the recovery** check box. This may be used when a partition locked by the operating system has to be recovered. Enabling the option allows rebooting the computer without user interaction during recovery.

4.14.4 File recovery options

You can select the following file recovery options:

- **Recover files with their original security settings** - if the file security settings were preserved during backup (see File-level security settings for backup (p. 62)), you can choose whether to recover them or let the files inherit the security settings of the folder where they will be recovered to. This option is effective only when recovering files from file/folder backups.
- **Set current date and time for recovered files** - you can choose whether to recover the file date and time from the backup or assign the files the current date and time. By default the file date and time from the backup will be assigned.

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4.14.5 Overwrite file options

Choose what to do if the program finds a file in the target folder with the same name as in the backup. By default, the program will not overwrite any files and folders, thus assigning the files on the hard disk unconditional priority over the files from the backup.

Selecting the **Overwrite existing files** check box will give the files from the backup unconditional priority over the files on the hard disk, though, by default, the system files and folders, hidden files and folders, as well as more recent files and folders are protected against overwriting. If you want to overwrite those files and folders too, clear the appropriate check boxes.

If you do not need to overwrite some files:

- Select/clear the **Hidden files and folders** check box to enable/disable overwriting of all hidden files and folders.
- Select/clear the **System files and folders** check box to enable/disable overwriting of all system files and folders.
- Select/clear the **More recent files and folders** check box to enable/disable overwriting of new files and folders.
- Click **Add specific files and folders** to manage the list of custom files and folders that you do not want to overwrite.
  - To disable overwriting of specific files, select the **Files and folders matching the following criteria:** check box and click the **Add...** button to create an exclusion criterion.
  - While specifying the criteria, you can use the common Windows wildcard characters. For example, to preserve all files with extension **.exe**, you can add ***.exe**. Adding **My???.exe** will preserve all .exe files with names consisting of five symbols and starting with “my”.

To delete a criterion, for example, added by mistake, click the Delete icon to the right of the criterion.

4.14.6 Performance of recovery operation

On the **Performance** tab you can configure the following settings:

Operation priority

Changing the priority of a backup or recovery process can make it run faster or slower (depending on whether you raise or lower the priority), but it can also adversely affect the performance of other running programs. The priority of any process running in a system, determines the amount of CPU usage and system resources allocated to that process. Decreasing the operation priority will free more resources for other CPU tasks. Increasing backup or recovery priority may speed up the process by taking resources from the other currently running processes. The effect will depend on total CPU usage and other factors.

You can set up the operation priority:

- **Low** (enabled by default) - the backup or recovery process will run slower, but the performance of other programs will be increased.
- **Normal** - the backup or recovery process will have the equal priority with other processes.
- **High** - the backup or recovery process will run faster, but the performance of other programs will be reduced. Be aware that selecting this option may result in 100% CPU usage by Acronis True Image Home 2011.

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4.14.7 Notifications for recovery operation

Sometimes a backup or recovery procedure can last an hour or longer. Acronis True Image Home 2011 can notify you when it is finished via e-mail. The program can also duplicate messages issued during the operation or send you the full operation log after operation completion.

By default all notifications are disabled.

Free disk space threshold

You may want to be notified when the free space on the backup storage becomes less than the specified threshold value. If after starting a backup Acronis True Image Home 2011 finds out that the free space in the selected backup location is already less than the specified value, the program will not begin the actual backup process and will immediately inform you by displaying an appropriate message. The message offers you three choices - to ignore it and proceed with the backup, to browse for another location for the backup or to cancel the backup.

If the free space becomes less than the specified value while the backup is being run, the program will display the same message and you will have to make the same decisions.

To set the free disk space threshold:

- Select the **Show notification message on insufficient free disk space** check box
- In the **Size** box, type or select a threshold value and select a unit of measure

Acronis True Image Home 2011 can monitor free space on the following storage devices:

- Local hard drives
- USB cards and drives
- Network shares (SMB/NFS)

*The message will not be displayed if the **Do not show messages and dialogs while processing (silent mode)** check box is selected in the **Error handling** settings.*

This option cannot be enabled for FTP servers and CD/DVD drives.

E-mail notification

You can specify an e-mail account that will be used for notifying you of the recovery process.

To specify the e-mail settings:

- Select the **Send e-mail notifications about the operation state** check box.
- Enter the e-mail address in the **E-mail address** field. You can enter several e-mail addresses in a semicolon-delimited format.
- Enter the outgoing mail server (SMTP) in the **Outgoing mail server (SMTP)** field.
- Set the port of the outgoing mail server. By default the port is set to 25.
- Enter the user name in the **User name** field.
- Enter the password in the **Password** field.
- If you want the client e-mail program to handle messages according to the set policy, for example, to put messages into the specified folder, specify the subject in the **Subject** field.

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- If your Internet service provider requires authorization on the incoming mail server before sending e-mails, select the **Log on to incoming mail server** check box, then enter the name of the POP3 server and set the port of the incoming mail server.
- To check whether your settings are correct, click the **Send test message** button.

Additional notification settings:

- To send a notification concerning process completion, select the **Send notification upon operation's successful completion** check box.
- To send a notification concerning process failure, select the **Send notification upon operation failure** check box.
- To send a notification with operation messages, select the **Send notification when user interaction is required** check box.
- To send a notification with full log of operations, select the **Add full log to the notification** check box.

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5 Using Acronis Online Backup

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5.1 What is Acronis True Image Home 2011 Online Backup?

Acronis True Image Home 2011 Online Backup is an application that allows you to use Acronis Online Backup service for safeguarding your most important files.

Acronis True Image Home 2011 Online Backup allows you to save important files to a secure remote location and recover them when the need arises. Because files are stored on a remote storage, they are protected even if your computer gets stolen or your house burns down. So the risk of data loss as a result of fire, theft, or other natural disasters is practically eliminated. If something happens to your backup image, PC, or external storage device, you can get your most important files back. If your computer crashes, you can recover your files back to your PC or another system that has Acronis True Image Home 2011 Online Backup or Acronis True Image Home 2011 installed on it.

In addition, you can recover your data from Acronis Online Storage on any computer with a Web browser without the necessity of installing True Image Home 2011 Online Backup or Acronis True Image Home 2011. Simply go to the Acronis Online Backup Web site using this link https://www.acronis.com/my/online-backup/ and log in to your account. When your subscription information page opens, click **Recover my data now**. After the Acronis Online Storage page opens, select the computer from which you backed up the files you need to recover and then download the files to your current computer.

You can save documents, photos, music, and more from up to five PCs on one account. If a computer crashes, no problem... Just log in from another computer and retrieve your files.

5.2 Subscription information

Performing backups in Acronis Online Storage requires subscription to the Online Backup service. To subscribe, start Acronis True Image Home 2011 Online Backup and click the **Subscribe to Online Backup service** link on the login window. This will open your Web browser and take you to the main Acronis Web site to continue registration.

If you already have an Acronis account, type the e-mail address and password for that account under "Log in to Your Account" to the right. You will be taken to your account page where you will be able to subscribe to the Online Backup service.

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If you do not have an Acronis account, fill in the appropriate fields, and the account will be created for you. Provide your first and last names and e-mail address. You will be offered a country selected on the basis of the IP address of your computer, though you can select another country, if you wish.

Then provide a password for your new account and confirm the password by retyping it once more in the appropriate field. When you have performed all actions necessary for account registration, please wait for an e-mail message that will confirm opening of the account.

To keep your personal data secure, choose a strong password for your online backups, guard it from getting into the wrong hands, and change it from time to time.

After opening an Acronis Online Backup account, log in to your account page, subscribe to the Online Backup service, and then wait for an e-mail message describing the details of your subscription plan and expiration date.

Trial subscription

If you would like first to try the Acronis Online Backup service, Acronis offers a 1-month free trial subscription to Acronis Online Backup service. You will have 2 GB of storage space for the trial period. Be aware that after the trial period is over, you won't be able to use the Online Backup service and all your data on the Online Storage will be deleted.

If you like Acronis Online Backup service, you can go to the subscription Web page and select a suitable subscription plan. To change your tariff, renew the subscription, or unsubscribe, go to the same subscription Web page.

5.3 Backing up to Acronis Online Storage

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5.3.1 Log in to the online storage

To use the Acronis Online Storage, you must first subscribe to the Online Backup service. To do this:

- Click **Subscribe to Online Backup service**
- When the Web page opens, follow the instructions on the page. For more details see Subscription information (p. 95).

Connecting to the online storage

To access the online storage:

Enter the E-mail address and password of your Acronis account, and then click the **Log In** button.

If you:

- want the program to remember your password, select the **Remember my password** check box. In this case you will not have to enter your password every time you log in to the online storage.

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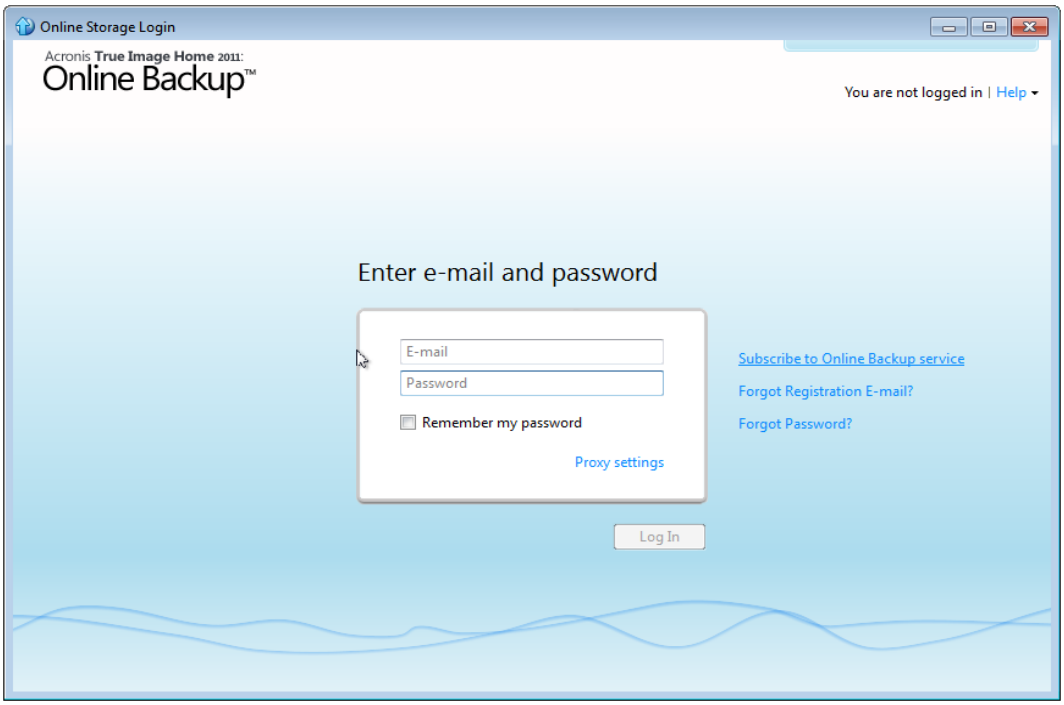
- have forgotten your password, click **Forgot password?** and follow the instructions on the opened Web page. A new password will be sent to you by e-mail.
- have forgotten which e-mail address you used for opening your Acronis account, click **Forgot Registration E-mail?** and follow the instructions on the opened Web page.
- connect to the Internet via a proxy server, click **Proxy settings** and then provide the settings for your proxy server. For more information see Proxy settings (p. 112).



5.3.2 Computer selection

If this is the first time that you are logging on to the online storage, you will be prompted to register your computer on the online storage.

To register a computer on the online storage:

- Type a name for the computer (for example, *My home PC*) in the appropriate field and then select an icon for the computer. You can type any name, not necessarily the computer's network name.
- If you prefer storing your data on the online storage in encrypted form, click the **Use encryption for enhanced protection** link and then type an encryption key in the appropriate field.
- Click the **Register** button.

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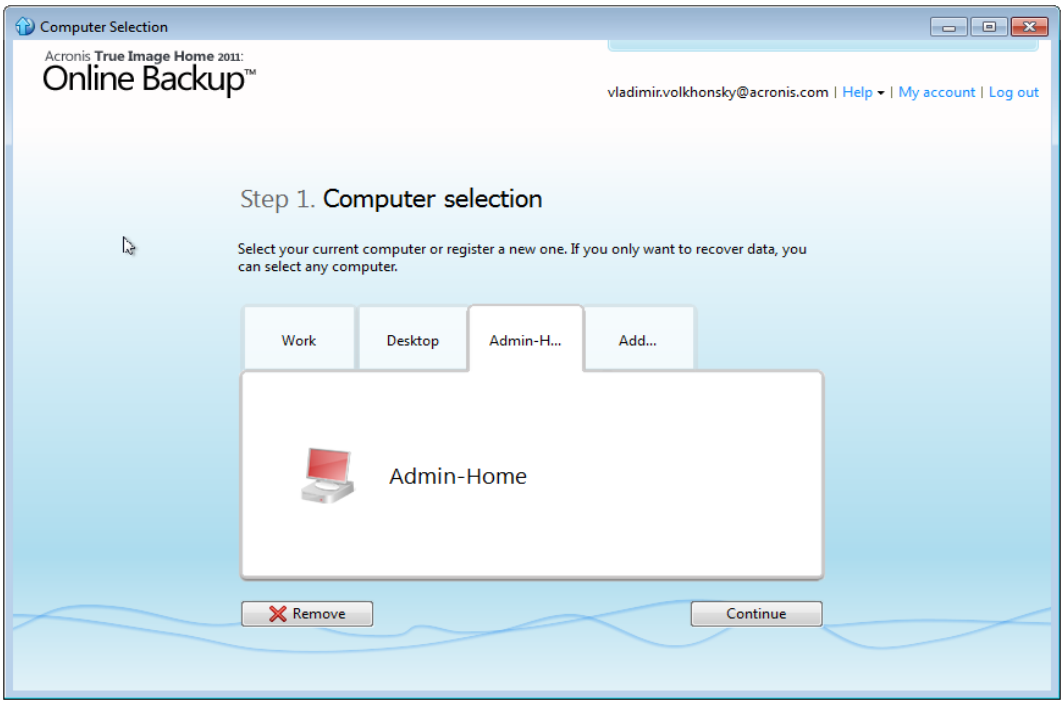
- After the computer connects to the Online Backup Server, set up an online backup task for this computer. For more information see Setting up online backup for a new computer (p. 99).



What is an encryption key

To protect your data on the online storage from unauthorized access, you can use encryption. In this case your files will be encrypted before transmission over the Internet and your data will be stored on the online storage in encrypted form. To encrypt and decrypt your data, the program needs the encryption key, that you should specify when you register your computer. An encryption key is a unique alphanumeric code, like a password. You can specify any set of characters you like. Note that the key is case-sensitive.

While attempting to access the encrypted data, the program asks you to enter the encryption key.

Remember the encryption key. The key is known only to you. Acronis do not know the key and do not have the means for retrieving the forgotten key.

If the desired computer is already registered:

- Select the registered computer icon.
- Type the encryption key, if necessary.
- Click the **Continue** button.

Removing a computer

This screen allows you to remove a computer from the registered computers list. Removing a computer results in deleting all data that was backed up from that computer, so such an operation must be carried out with caution. To remove a computer, select it by its name and click the **Remove** button, then click **Yes** in the confirmation window.

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5.3.2.1 Data encryption in Online Backup

To protect your data on the online storage from unauthorized access, you can use encryption. In this case your data will be stored on the online storage in encrypted form. To encrypt and decrypt your data, the program needs the encryption key, that you should specify when you register your computer. An encryption key is a unique alphanumeric code, like a password. You can specify any set of characters you like. Note that the key is case-sensitive.

An encryption key cannot be retrieved. Please remember the key that you specify during your computer registration.

While attempting to access the encrypted data, the program asks you to enter the encryption key.

5.3.2.2 Why does the program ask for the key

The program will ask you to enter the encryption key when it needs to be used for decrypting the backed up data from the selected computer on the Online Storage. You will not be able to access the data until you provide the correct key. To access the data, type in the encryption key and click OK.

5.3.3 Setting up online backup for a new computer

After registering a new computer on Acronis Online Storage is complete, you are offered to specify what to back up from this computer and when to do that. Clicking the appropriate link opens the **Items to Back Up Selection** window, where you can specify the files and folders you want to back up on the Online Storage. For more information see Selecting items to back up (p. 103). Having made the selection, click the **Save and Close** button to return to the previous window for setting a schedule for online backup or for starting the backup manually.

To set an online backup schedule, click the link with the default backup schedule settings (Never) and then turn on the scheduler by clicking the **Turn On** button . For more information on scheduling the online backup task see Scheduling (p. 106).

Clicking the **Save** button will save the online backup task you have set and take you to the main program window. The backup will run according to the set schedule.

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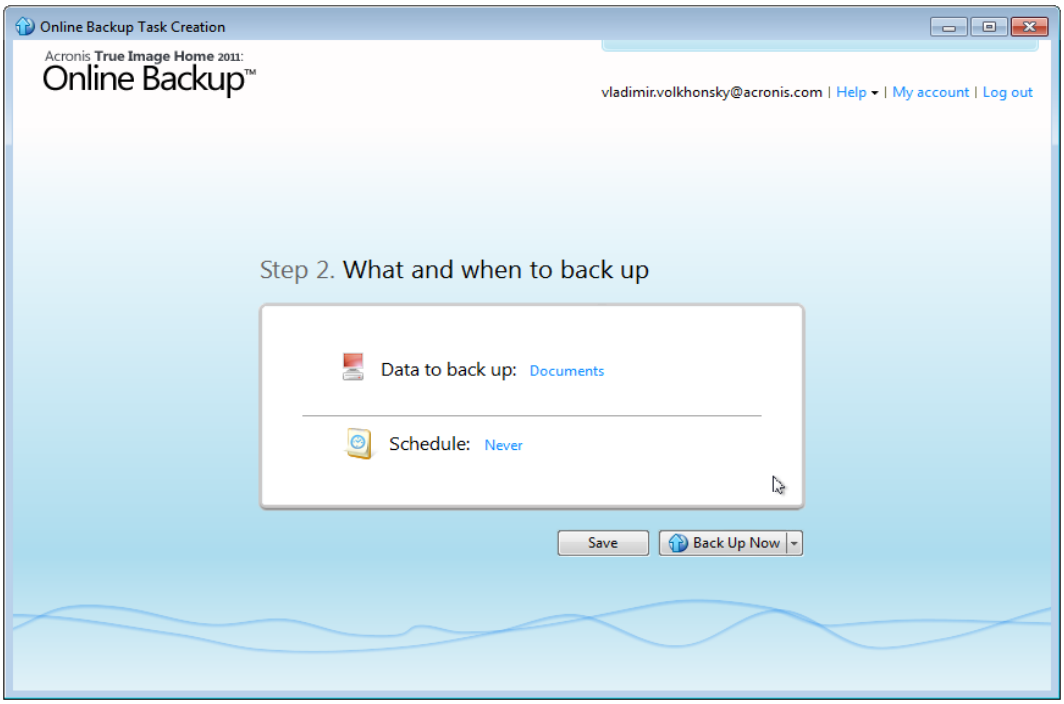
To start backup immediately, click **Back Up Now**. You can also delay online backup start for up to 6 hours by clicking the down arrow to the right of this button and selecting a delay interval from the dropdown list.


Online Backup Task Creation
Acronis True Image Home 2011:
Online Backup™
vladimir.volkhonsky@acronis.com | Help | My account | Log out
Step 2. What and when to back up
Data to back up: Documents
Schedule: Never
Save
Back Up Now

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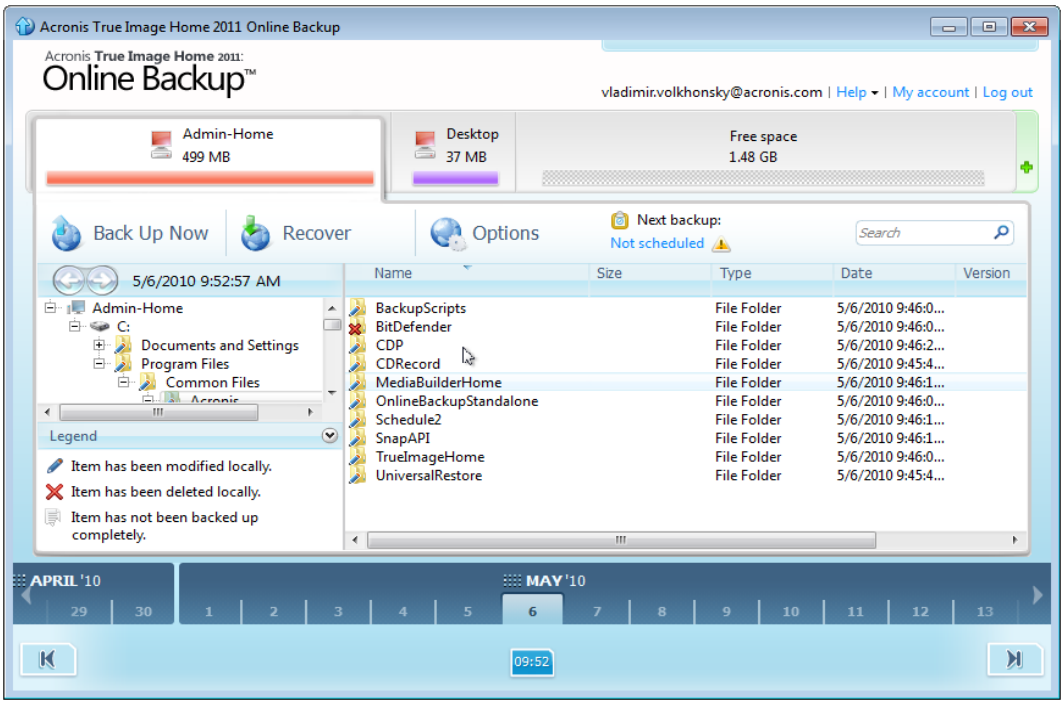
5.3.4 Main window

This window shows the current state of your space on the Acronis Online Storage. The online storage space is presented as a stripe. All your registered computers are displayed as tabs that share the stripe. You can see the amount of storage space that every computer has used, as well as the amount of free space left on the Online Storage in accordance with your quota. If you want to increase the Online Storage space quota, click the "+" icon to the right of free space stripe. You will be taken to your Acronis account Web page, where you can purchase additional Online Storage space.



To remove the selected computer from the registered computers list and delete all its online backups from the Online Storage, click **Options** → **Remove from Online Storage** and then click **Yes** in the confirmation window.

Online data management

You can back up data only from the current computer. You can specify what data to back up, what data to exclude from the backup, schedule the online backup task, and recover data from the Online Storage. In addition, you can delete from the Online Storage files and folders you do not need anymore.

Every time you back up the same file, Acronis True Image Home 2011 Online Backup creates versions of the file on the Online Storage. When recovering the file you will be able to select the version that you need.

For all other computers you can only browse and recover the backed up data that is stored on the Online Storage.

Toolbar

The toolbar contains the following buttons:

- **Back Up Now** - click to run the online backup task now (present only for the current computer).
- **Recover** - click to recover desired files and folders from the Online Storage

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- **Options** - click to open the **Options** menu where you can specify all Acronis True Image Home 2011 Online Backup options and settings, as well as remove a computer from the Online Storage.

The **Options** menu includes the following items:

- **What to Back Up** - select to open the dialog box where you can specify the data to back up and the data you want to exclude from the backup. Your selection will be stored in the online backup task. So every time you run the task, the selected items will be backed up by default. You can change your selection any time.
- **Schedule** - select to set online backup task scheduling.
- **Settings** - select to change Acronis True Image Home 2011 Online Backup settings.
- **Remove from Online Storage** - select to remove the computer from the Online Storage and delete all data backed up from that computer.

The toolbar also shows when the next online backup will run. Clicking the corresponding link opens the Scheduler where you can change the online backup schedule.

The toolbar has a Search field that allows you to search for the file you want to recover. To perform search, select on the folder tree the partition from which the file was backed up and then enter the file's name (or a partial name) in the search field with the magnifying glass icon to the right of the field. The search is performed only among the files backed up from the currently selected partition. The found files, if any, will be shown in the right pane under the **Search results** item at the bottom of the folder tree.

Legend

Clicking the up arrow (^) at the right side of the **Legend** line shows the icons the program uses for indicating the states of items (files and folders) backed up on the Online Storage. Brief descriptions explain the meaning of those icons. These icons will let you see which items have been modified or deleted locally since the last online backup. They will also let you know which folders have been backed up only partially. If the Legend area interferes with the viewing of the directory tree of the current computer, you can collapse it by clicking the down arrow at the right-side end of the **Legend** line.

Time scale

At the bottom of the window there is a special time scale. To view any prior data state, just find the date you need using the arrows on the time scale, click the date and select a time. To go to the oldest backup date for a selected file or folder, click the "Left arrow" button below the left end of the time scale. To return to the most recent backup date, click the "Right arrow" button below the right end of the time scale.To speed up the searching process you can switch the time scale to days mode or to months mode and scroll days or months respectively. To switch to the months mode, click on a month's name on the time scale. Selecting the required month on the month scale automatically returns you to the days mode.

5.3.5 Online backup task creation

The online backup task allows you to schedule the backup to the online storage. You can create one online backup task only. The task will be run even after you log off the online storage.

To create the Online backup task:

- Click **Options** → **What to back up** in the main window and specify the data categories and/or files and folders to back up and items to exclude from the online backup

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- Click **Options** → **Schedule** in the main window and set up scheduling for the online backup task. For more information see Scheduling (p. 106)
- Click the **Back Up Now** button if you want to start the first online backup immediately

The first online backup may take a considerable amount of time to complete. Further backup processes will likely be much faster, because only changes to files will be transferred over the Internet.

5.3.5.1 Selecting items to back up

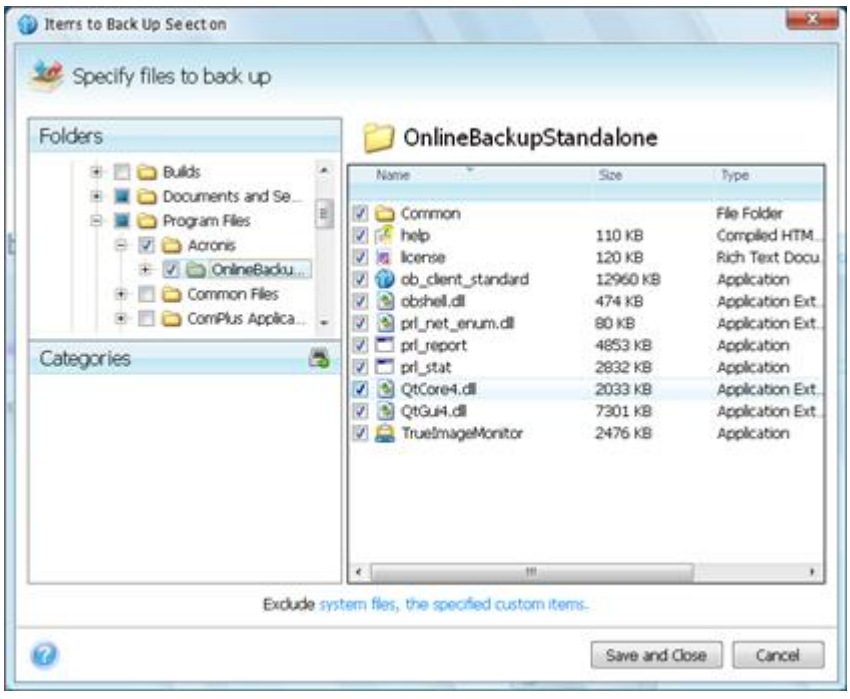
In the **Items to Back Up Selection** window you can select the data you want to include in the online backup task and files to exclude from the task. Your selection will be stored, so every subsequent time you run the task, the selected items will be backed up by default. You can change your selection any time.

Including items

Specify items to include by selecting the corresponding check boxes:

You can include both file categories and individual files and folders.

When selecting the file category(ies) to back up, you can include the following default categories: **Documents, Finance, Images, Video**, and **Music**. Each category represents all files of associated types found on the computer's hard drives. Furthermore, you can add any number of custom categories containing files and folders. The new categories will be saved and displayed along with the above. You can change the contents of any custom or default file category (edit the category) or delete it. The default file categories cannot be deleted.



For more information on custom categories see Creating a custom data category (p. 104). If you do not want to keep the custom contents of the current backup by creating a data category, simply select the files/folders from the tree in the **Folders** pane.

- To include an entire folder, select the folder's check box in the folders pane.

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- To include particular items in a folder, click the folder's name in the folders pane, and then select the items' check boxes in the folder contents pane.

Excluding items

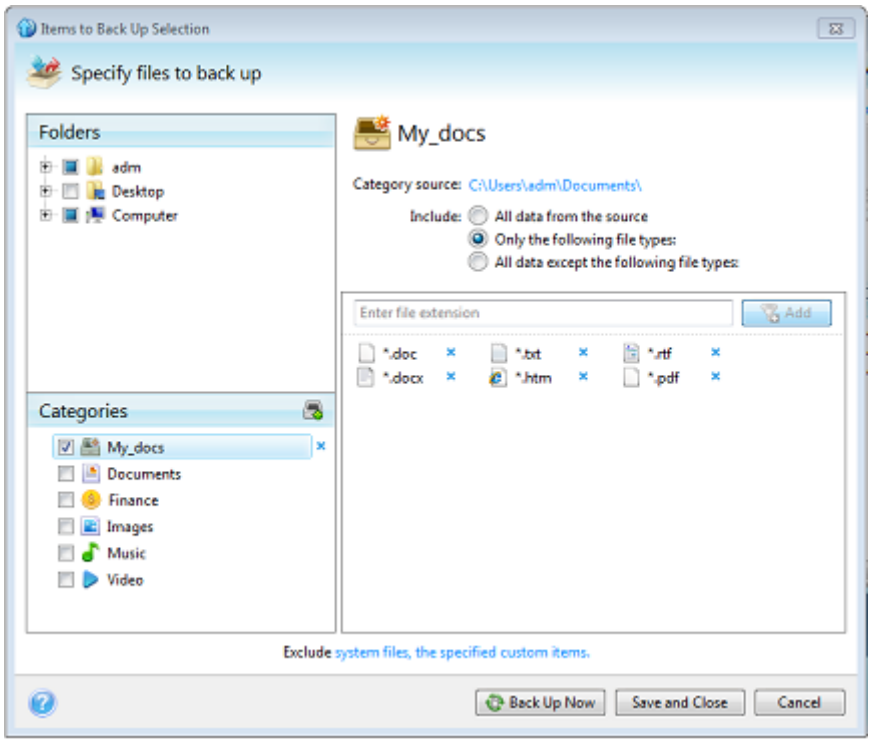
File filtering can be applied to manually added folders by specifying which files to exclude from backup. For more information see Excluding items from online backup (p. 105).

Having finished selection of items to include and exclude, click the **Back Up Now** button to start online backup immediately, otherwise click the **Save and Close** button to save the selection for backing up later or on schedule.

You can also cancel the selection by clicking **Cancel**.

Creating a custom data category

To add a custom data category, click the **Add category** icon in the **Categories** pane and provide a name for the category. Select the data source (e.g. a folder) for the new category by clicking the link to the right of **Category source:** in the right pane, and then clicking the **Browse** button. By default the new category will contain **All data from the source** in the data source, but you can apply filters to select the specific types of files that you wish or do not wish to back up.



To set a filter, select its type: **Only the following file types** or **All data except the following file types**.

You can add file types for the selected filter by entering their extensions in the appropriate field one at a time and then clicking **Add**.

The added file types appear in the window below.

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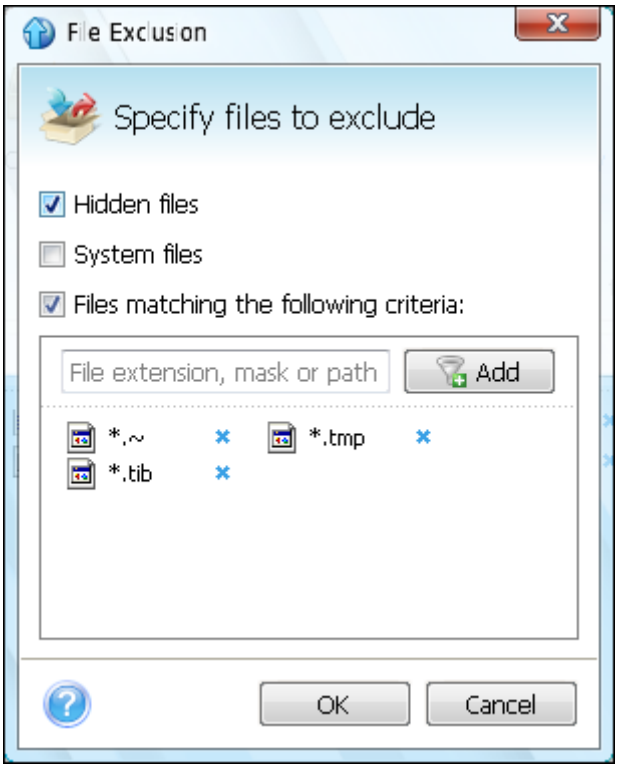
5.3.5.2 Excluding items from online backup

Excluding unnecessary files from online backup may be useful as the data transfer rate and available storage space are limited.

To exclude files, click the corresponding link at the bottom of the **What to back up** window.

You can exclude hidden and system files from online backup by selecting the corresponding check boxes.



In addition, you can exclude files meeting the criteria you specify. To do this, select the **Files matching the following criteria** check box, enter the exclusion criterion, and then click **Add**.

By default, the program excludes from backups files with the following extensions: **.~**, **.tmp**, and **.tib**.

You can enter explicit file names for exclusion from the backup:

file.ext - all such files will be excluded from the backup.

C:\file.ext- the file.ext file on the C: disk will be excluded.

You can also use wildcards:

***.ext** - all files with a .ext extension will be excluded.

C:*.ext - files located in the root of partition C with a .ext extension will be excluded.

f_name.* - files with any extension and named f_name will be excluded.

??name.ext - all files with a .ext extension, having six letters in their names (starting with any two symbols (??) and ending with *name*), will be excluded.

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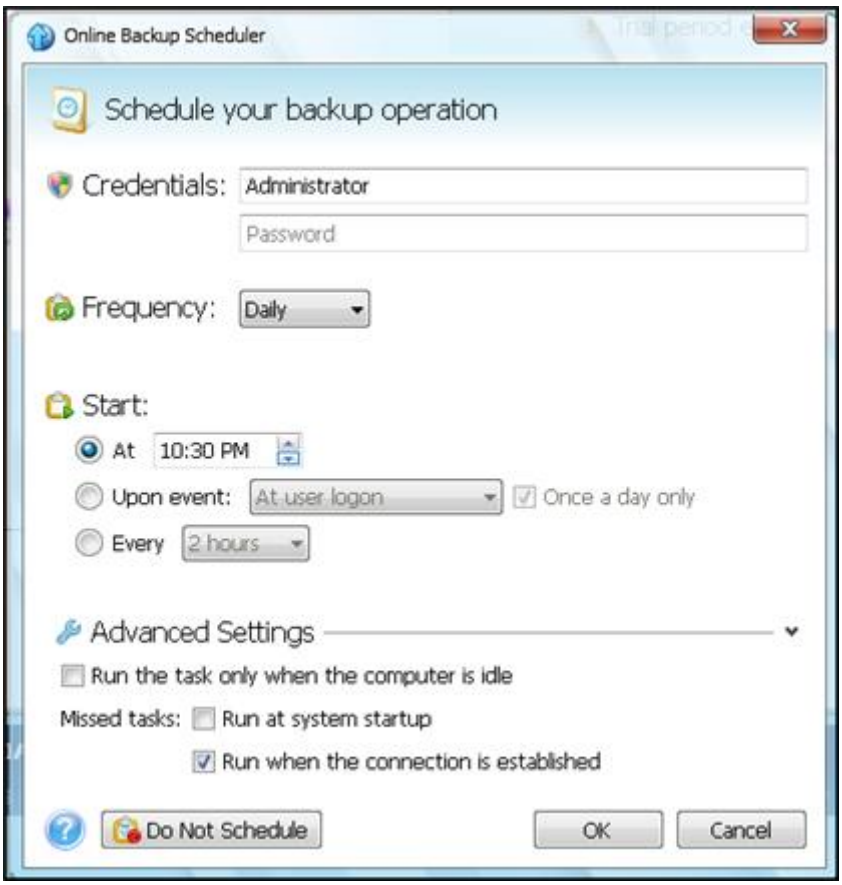
To delete a criterion, for example, added by mistake, click the Delete icon to the right of the criterion.

To cancel changes in the items to be excluded, click **Cancel**.

After you make changes in the items to be excluded, click **OK** to confirm the changes and exit from the **What to exclude** window.

5.3.5.3 Scheduling

The **Scheduler** window allows you to specify the online backup task execution settings.



Choose one of the following backup frequencies:

- Daily (p. 107) - the task will be executed once a day or more frequently
- Weekly (p. 107) - the task will be executed once a week or several times a week on the selected days
- Monthly (p. 108) - the task will be executed once a month or several times a month on the selected dates

Next choose when to start online backup:

- At a specified time. Specify the time in the corresponding field.
- Upon event. Choose the event you need: At user logon, At user logoff, At system startup or At system shutdown. To run a backup only at the first occurrence of the event, select the **Once a day only** box.

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- Every () hours. Choose backup periodicity from the dropdown list (for, example, every 2 hours). This setting is available only for daily backups.

Clicking the **Do Not Schedule** button turns off the scheduler and online backup will be performed only when you click **Back Up Now** in the main window.

Advanced settings

Clicking **Advanced Settings** allows you to specify the following additional settings for online backup scheduling.

To postpone a scheduled task until the next time the computer is not in use (screen saver is displayed or computer is locked), select the **Run the task only when the computer is idle** check box.

The backup won't be performed if the computer is switched off or there is no Internet connection when the scheduled time comes, but you can force the missed backup to run at the next system startup or when an Internet connection is established. To do so, select the **Run at startup** or **Run when the connection is established** check box (or both).

Some of these options might be disabled depending on the operating system.

Having finished scheduling of online backups, click **OK** to return to the main window.

Daily execution parameters

You can set up the following parameters for daily task execution:

- **Frequency:** Daily
- **Start:** at a certain time, upon a certain event or every certain number of hours

  If you select **At**, set the task's start time. Enter hours and minutes manually, or set the desired start time using the up and down buttons.

  If you select **Upon event**, choose the event you need: At user logon, At user logoff, At system startup or At system shutdown. To run a backup only at the first occurrence of the event, select the **Once a day only** box.

  If you select **Every**, choose daily backup periodicity from the dropdown list (for, example, every 2 hours).

Advanced settings

- To postpone a scheduled task until the next time the computer is not in use (screen saver is displayed or computer is locked), select the **Run the task only when the computer is idle** check box.
- If the computer is switched off when the scheduled time comes, the backup won't be performed, but you can force the missed task to run at the next system start-up. To do so, select the **If missed, run the task at startup** check box.
- If there is no Internet connection when the scheduled time comes, you can force the missed backup to run when an Internet connection is established. To do so, select the **Run when the connection is established** check box.

Weekly execution parameters

You can set up the following parameters for weekly task execution:

- **Frequency:** Weekly

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Select the days on which to execute the task by clicking on their names.

- **Start:** either at a certain time or upon a certain event

  If you select **At**, set the task's start time. Enter hours and minutes manually, or set the desired start time, by using the up and down buttons.

  If you select **Upon event**, choose the event you need: At user logon, At user logoff, At system startup or At system shutdown. To run a backup only at the first occurrence of the event, select the **Once a day only** box.

Advanced settings

- To postpone a scheduled task until the next time the computer is not in use (screen saver is displayed or computer is locked), select the **Run the task only when the computer is idle** check box.
- If the computer is switched off when the scheduled time comes, the backup won't be performed, but you can force the missed task to run at the next system start-up. To do so, select the **If missed, run the task at startup** check box.
- If there is no Internet connection when the scheduled time comes, you can force the missed backup to run when an Internet connection is established. To do so, select the **Run when the connection is established** check box.

Monthly execution parameters

You can set up the following parameters for monthly task execution:

- **Frequency:** Monthly

  If you select **Every**, choose a numeral and the day of the week from the dropdown lists (example: First Monday - the backup will be performed on the first Monday of every month)

  If you select **On**, choose the date(s) for backup execution (example: you may want the task to be run on the 10th, 20th, and Last day of the month)

- **Start:** either at a certain time or upon a certain event

  If you select **At**, set the task's start time. Enter hours and minutes manually, or set the desired start time, by using the up and down buttons.

  If you select **Upon event**, choose the event you need: At user logon, At user logoff, At system startup or At system shutdown. To run a backup only at the first occurrence of the event, select the **Once a day only** box.

Advanced settings

- To postpone a scheduled task until the next time the computer is not in use (screen saver is displayed or computer is locked), select the **Run the task only when the computer is idle** check box.
- If the computer is switched off when the scheduled time comes, the backup won't be performed, but you can force the missed task to run at the next system start-up. To do so, select the **If missed, run the task at startup** check box.
- If there is no Internet connection when the scheduled time comes, you can force the missed backup to run when an Internet connection is established. To do so, select the **Run when the connection is established** check box.

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5.3.5.4 Credentials

In some cases when you plan an operation to be performed in the future, you have to specify the credentials (Windows account name and password of the user). For example, this is required when you schedule a backup or specify Pre/Post commands for backup operation. If you do not enter the credentials, scheduled execution will be impossible.

To specify the credentials:

- Enter the user name in the appropriate field. By default this field displays the current user name.
- Enter the password in the appropriate field. If you do not enter the password or enter an incorrect password, the program will notify you that the credentials are not valid.

5.3.5.5 Backup operation progress

Once an online backup is started (either manually or on schedule) the backup progress window appears.

In this window Acronis True Image Home 2011 Online Backup shows the approximate backup time and data transfer speed.

The progress bar indicates the level of completion of the online backup.

In some cases, the online backup operation may take a long time to be completed. If this is the case, select the **Shut down the computer after the backup is complete** check box. When the backup finishes, Acronis True Image Home 2011 Online Backup will turn the computer off.

You can also close the progress window by clicking **Hide**. The backup will continue, but you will be able to close the main program window. The program will continue working in the background and will automatically close once the backup is finished.

If you need to suspend the backup for any reason, click the **Suspend** button. You will be able to resume the suspended operation by clicking **Back Up Now** in the main program window.

5.3.6 Online Backup settings

The following settings are available for online backup:

- Connection attempts (p. 110)
- Storage connection speed (p. 110)
- Storage cleanup (p. 111)
- Proxy settings (p. 112)
- Backup priority (p. 113)
- E-mail notification (p. 113)
- Pre/Post commands (p. 115)
- Acronis Customer Experience Program (p. 116)

You can always revert the changed settings to their default values.

- To reset all the customized options to the default values click **Reset all to default**.
- To reset the current option settings to the default values click **Reset the current to default**.

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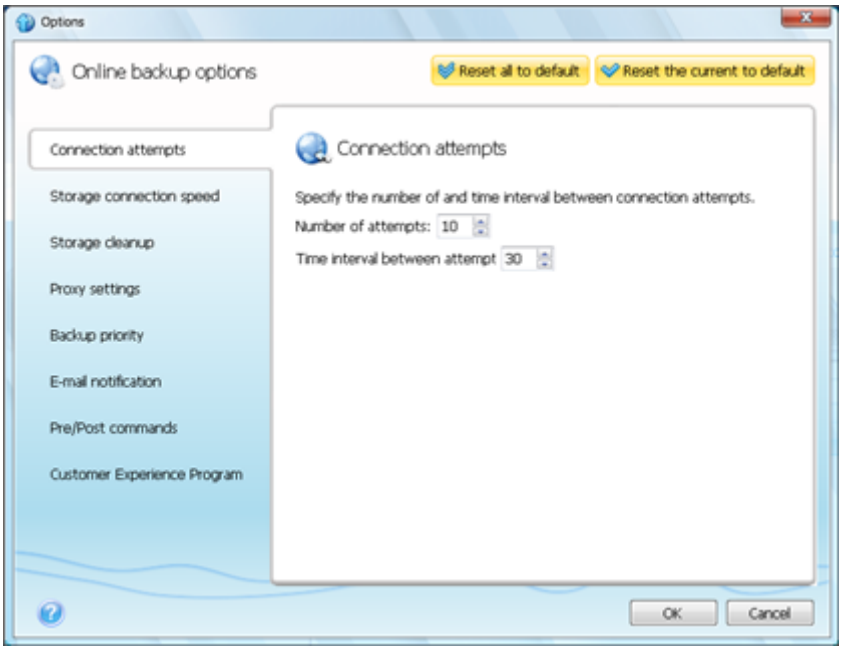
5.3.6.1 Connection attempts

On this page you can specify the number of connection attempts and the time interval between the attempts.

In case of any network problems, if the first connection attempt fails, the program will repeat the attempts till a connection is successfully established. You can set the number of connection attempts and the time interval between the attempts in seconds. To do so, type or select the values in the appropriate boxes.



5.3.6.2 Storage connection speed

You can reduce the influence of the online storage connection on other network connections of your computer. Set the connection speed that will allow you to send e-mail or surf the Web without annoying slowdowns while online backup is running. To do so:

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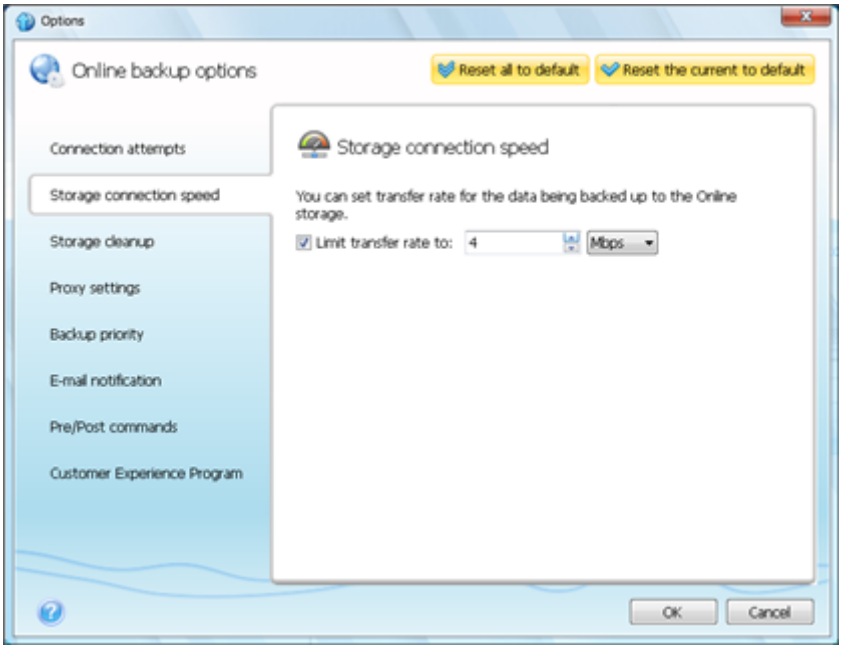
- Select the **Limit transfer rate to** check box and specify an optimal value and an appropriate measure (kilobits or megabits per second)

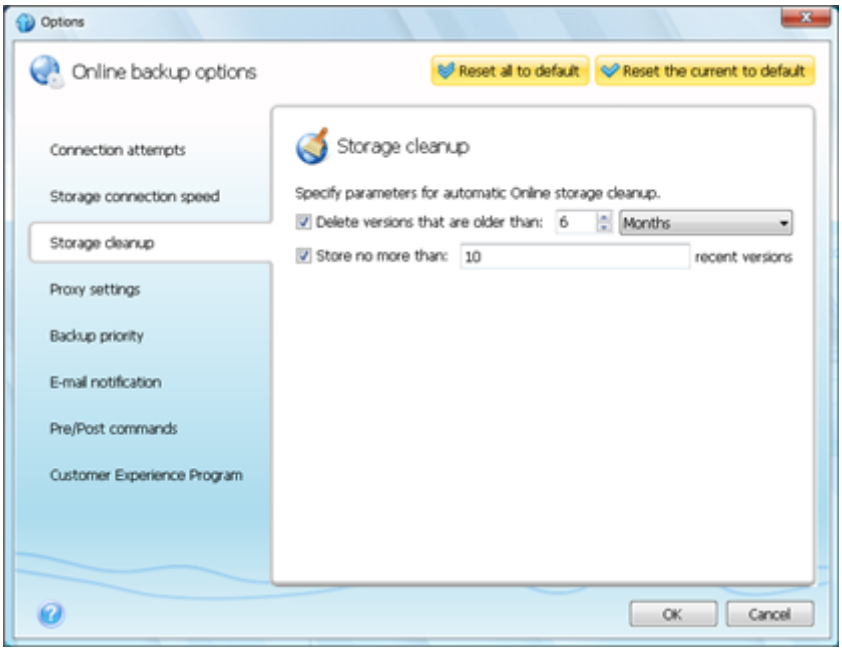


5.3.6.3 Storage cleanup

You can configure the cleanup settings for the Online storage to optimize usage of its space.

To set the limits for the amount of versions in the Online storage:

- Select the **Delete versions that are older than** check box and enter a value that limits the maximum age of the older versions. All other versions will be automatically deleted except the most recent versions.
- Select the **Store no more than … recent versions** check box and enter a value that limits the maximum number of all versions in the storage.



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5.3.6.4 Proxy settings

If your computer is connected to the Internet using a proxy server, you can adjust the proxy server settings. To use the proxy server, select the **Use proxy** check box.

Acronis Online Backup supports only http and https proxy servers.

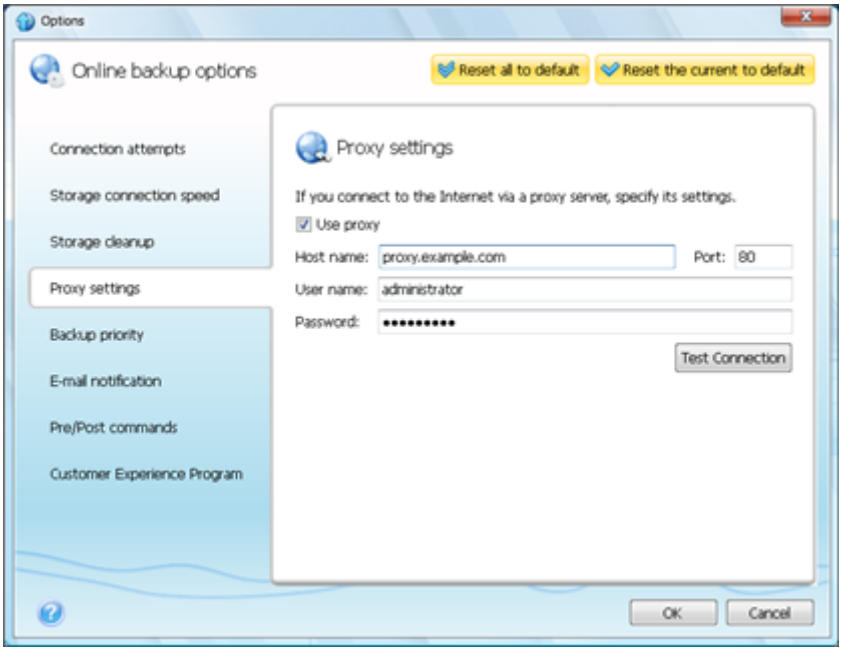
To set up proxy server settings:

In the **Host name** box, type the name or IP address of the proxy server, such as proxy.example.com or 192.168.0.1

In the **Port** box, type the proxy server's port, such as 8080

In the **User name** and **Password** boxes, type your credentials to connect to the proxy server.

To test the proxy server settings, click the **Test Connection** button.



If you do not know your proxy server settings, contact your network administrator or Internet service provider for assistance. Alternatively, you can try to take these settings from your browser's configuration.

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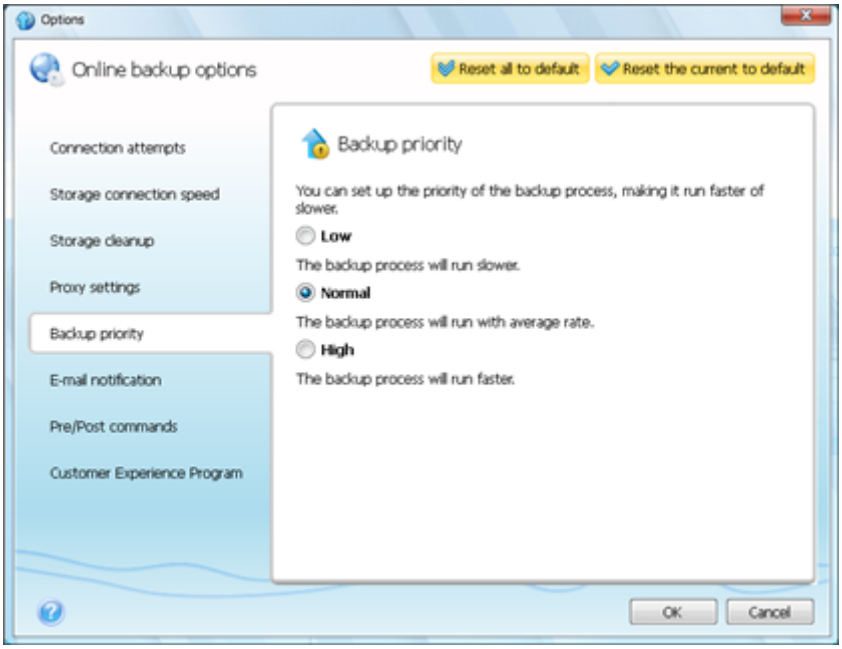
5.3.6.5 Backup priority

Changing the priority of a backup process can make it run faster or slower (depending on whether you raise or lower the priority), but it can also adversely affect the performance of other running programs. The priority of any process running in a system, determines the amount of CPU usage and system resources allocated to that process. Decreasing the backup priority will free up more resources for other CPU tasks. Increasing backup priority may speed up the backup process by taking resources from the other currently running processes. The effect will depend on total CPU usage and other factors.



You can set up the backup process priority:

- **Low** (enabled by default) - the backup process will run slower, but the performance of other programs will be increased
- **Normal** - the backup process will have equal priority with other processes
- **High** - the backup process will run faster, but the performance of other programs will be reduced. Be aware that selecting this option may result in 100% CPU usage by Acronis True Image Home 2011 Online Backup

5.3.6.6 E-mail notification

You can specify an e-mail account that will be used for notification of the backup process.

To specify the e-mail settings:

- Enter the e-mail address in the **E-mail Address** field. You can enter several e-mail addresses in a semicolon-delimited format.
- Enter the outgoing mail server (SMTP) in the **Outgoing mail server (SMTP)** field
- Set the port of the outgoing mail server. By default the port is set to 25
- Enter the user name in the **User Name** field

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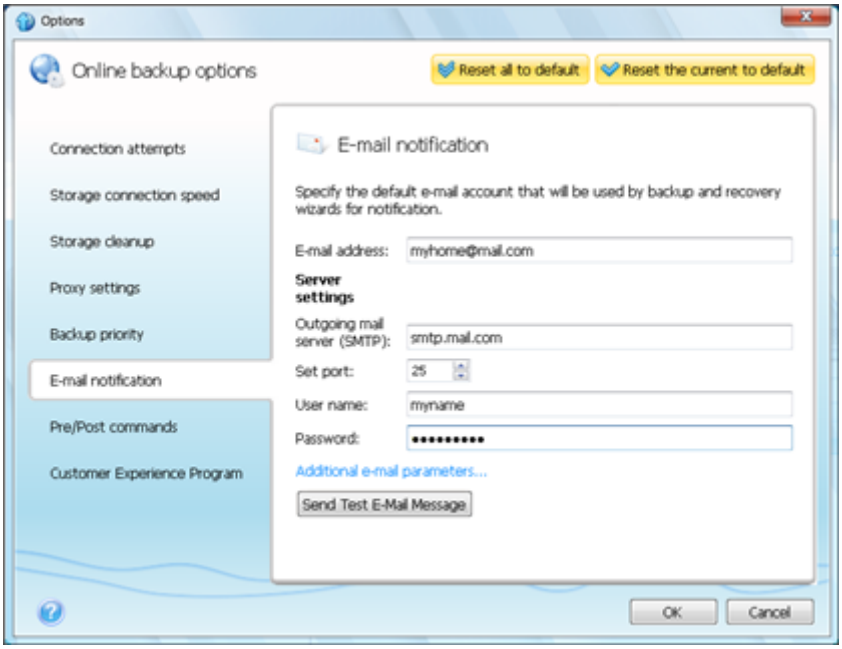
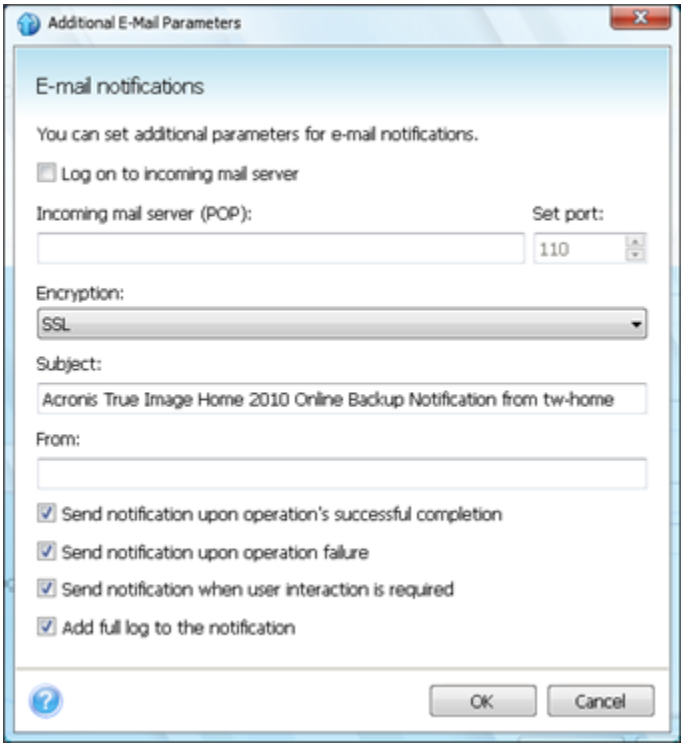
- Enter the password in the **Password** field



To specify additional notification settings, click the **Additional e-mail parameters...** link.



- If your Internet service provider requires authorization on the incoming mail server before sending e-mails, check the **Log on to incoming mail server** box
- If you would like to use encryption, select the required encryption protocol from the dropdown list in the **Encryption** field
- If you want the client e-mail program to handle messages according to the set policy, for example, put messages into a specified folder, specify the name of the sender in the **From** field,

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and/or the subject in the **Subject** field. If you leave the **From** field empty, the e-mail will be composed using the name from the outgoing account.

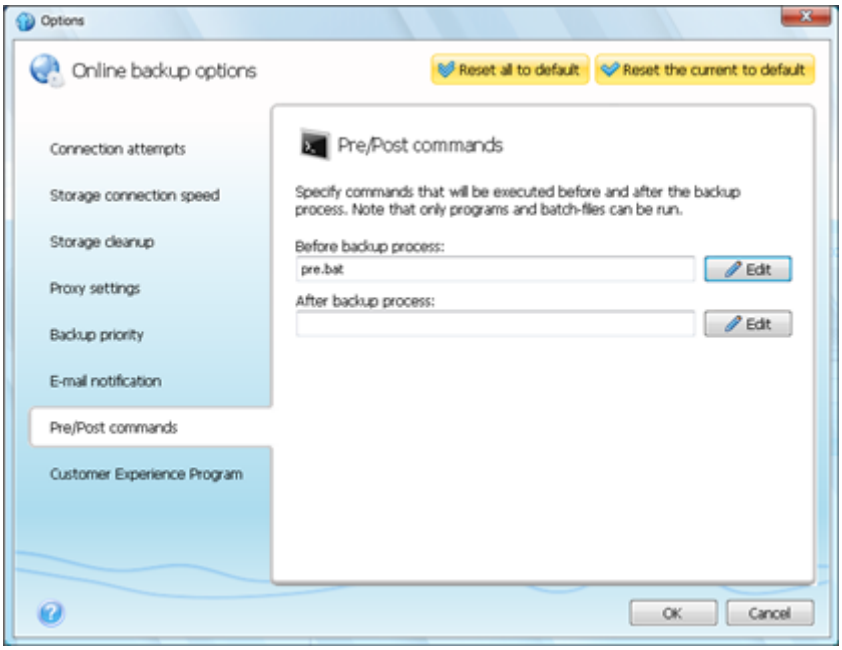
- To send notification concerning process completion, select the **Send notification upon operation's successful completion** check box.
- To send notification concerning process failure, select the **Send notification upon operation failure** check box.
- To send notification with operation messages, select the **Send notification when user interaction is required** check box
- To send notification with full log of operations, select the **Add full log to the notification** check box

After making the additional settings, click **OK** to return to the previous window.

To check whether your settings are correct, click the **Send Test E-mail Message** button.

5.3.6.7 Pre/Post commands

You can specify commands or batch files to be executed automatically before and/or after the backup procedure. For example, you may want to configure a third-party antivirus product to be used each time for scanning the files to be backed up before the backup starts. Click **Edit** to open the **Edit Command** window where you can easily input the command, its arguments and working directory or browse folders to find a batch file.



- In the **Command** field, type-in a command or select it from the list. Click **...** to select a batch file.
- In the **Working directory** field, type-in a path for command execution or select it from the list of previously entered paths.
- In the **Arguments** field enter or select command execution arguments from the list.

Please do not try to execute interactive commands, i.e. commands that require user input (for example, "pause"). These are not supported.

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Unselecting the **Do not perform operations until the command's execution is complete** box, selected by default, will permit the backup process to run concurrently with your command execution.

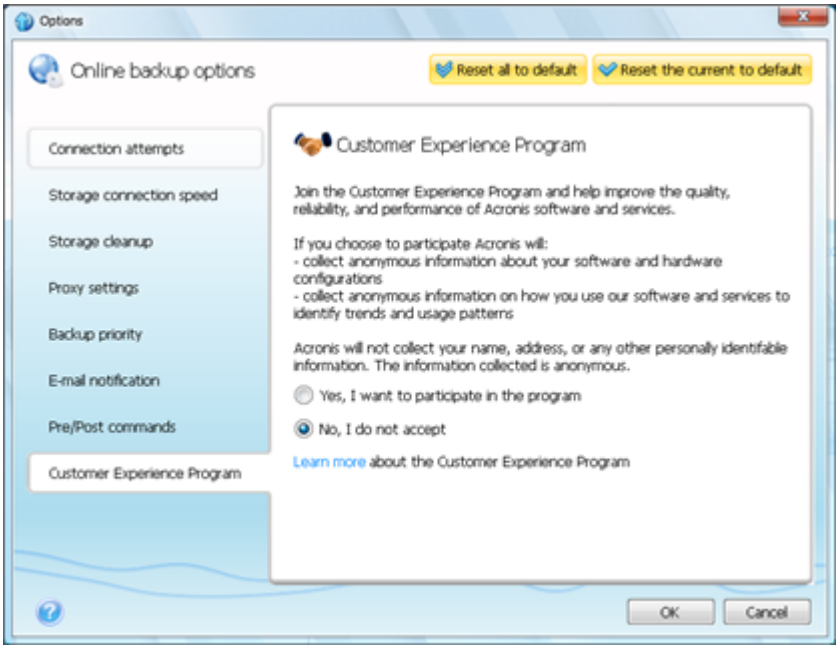
If you want the backup to be performed even if your command fails, unselect the **Abort the operation if the user command fails** box (selected by default).

You can test execution of the command you created by clicking **Test command**.

5.3.6.8 Acronis Customer Experience Program

Acronis Customer Experience Program (CEP) is a new way to allow Acronis customers to contribute to the features, design and development of Acronis products. This program enables our customers to provide us with various information, including information about the hardware configuration of your host computer, the features you use most (and least), and the nature of the problems you face. Based on this information, we will be able to improve the Acronis products and the features you use most often.

If you choose to participate, the technical information will be automatically collected every 90 days. We will not collect any personal data, like your name, address, phone number, or keyboard input. Participation in the CEP is voluntary; however, the end results are intended to provide software improvements and enhanced functionality to better meet the needs of our customers.


Options
Online backup options
Reset all to default
Reset the current to default
Connection attempts
Storage connection speed
Storage cleanup
Proxy settings
Backup priority
E-mail notification
Pre/Post commands
Customer Experience Program
Customer Experience Program
Join the Customer Experience Program and help improve the quality, reliability, and performance of Acronis software and services.
If you choose to participate Acronis will:
- collect anonymous information about your software and hardware configurations
- collect anonymous information on how you use our software and services to identify trends and usage patterns
Acronis will not collect your name, address, or any other personally identifiable information. The information collected is anonymous.
Yes, I want to participate in the program
No, I do not accept
Learn more about the Customer Experience Program
OK
Cancel

Note that you will be able to leave the program any time.

Click the **Learn more** link to read the terms of participation.

To make a decision:

- Choose **Yes, I want to participate in the program** if you want to join the program
- Choose **No, I do not accept** if you do not want to join the program

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5.4 Recovery from Online Storage

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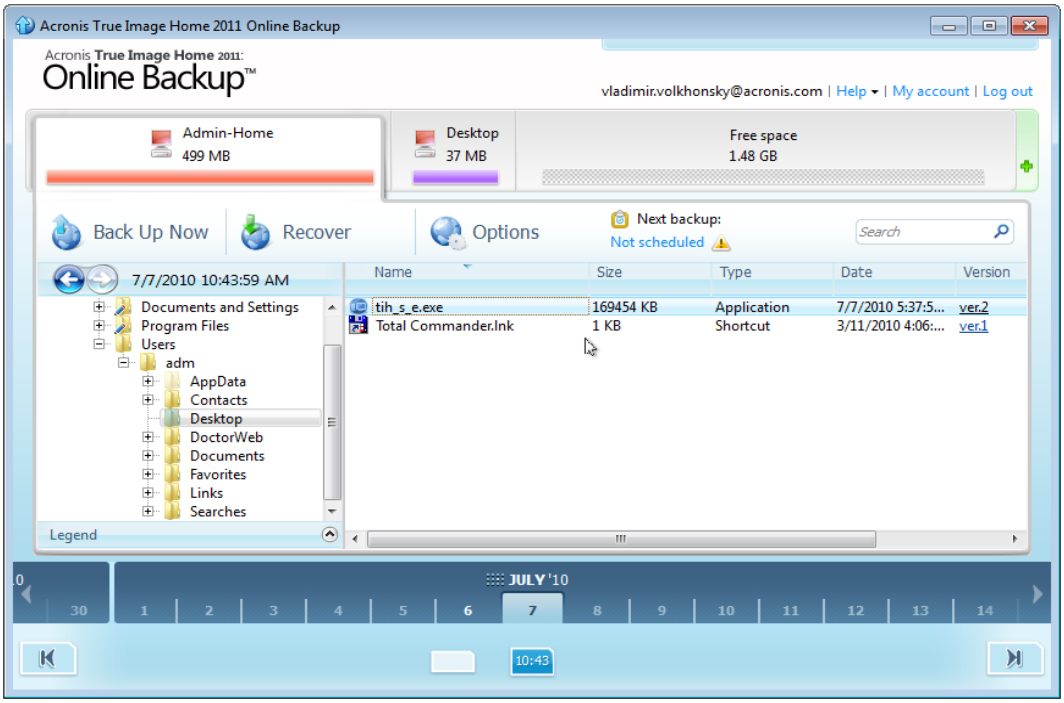
5.4.1 Recovering data from Online Storage

Acronis True Image Home 2011 Online Backup allows you to browse and recover data that was backed up on Online Storage. If you have backed up data from several computers, select the computer from which you backed up the data you want to recover. If the data from the selected computer is stored on the Online Storage in encrypted form, you will be asked to enter the encryption key which has been used for encryption. You will not be able to access the data until you enter the correct encryption key.



Using time scale

Having selected the computer, you can search the data you need to recover. All your backups have creation dates. These dates determine the states that data had during the backup operation. Acronis True Image Home 2011 Online Backup provides for viewing the data states using a special time scale at the bottom of the window. To view any prior data state, just find the date you need using the arrows on the time scale, click the date and select a time. To go to the oldest backup date for a selected file or folder, click the "Left arrow" button below the left end of the time scale. To return to the most recent backup date, click the "Right arrow" button below the right end of the time scale. To speed up the searching process you can switch the time scale to days mode or to months mode and scroll days or months respectively. To switch to the months mode, click on a month name on the time scale. Selecting the required month on the month scale automatically returns you to the days mode.

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Selecting data

The main area displays the data backed up on the Online Storage. The area contains the folder tree (on the left) and the folder contents pane (on the right). You can select the items using both panes. To select multiple files/folders, you can use the **Ctrl** and **Shift** keys like in Windows Explorer. After you finish selection, right-click and select the required action in the shortcut menu.

Shortcut menu items:

- **Open** - opens a folder or recovers the file to a temporary folder and then opens the file using the associated application
- **Recover** - recovers the selected file or folder
- **View Versions** - opens the window that contains the list of the selected file's versions. In the window you can select the version you want to recover or delete unneeded versions (not available for folders)
- **Delete** - deletes the selected file or folder from the Online Storage

Recovery

When you choose **Recover** either in the shortcut menu or on the toolbar, Acronis True Image Home 2011 Online Backup opens the Browse for folder dialog. By default the original location from which the files were backed up will be selected. If necessary, you can select another folder or create a new folder for the files to be recovered to by clicking the **Make New Folder** button. After selecting the folder click **OK**.

If you recover the files to the original folder and Acronis True Image Home 2011 Online Backup finds a file with the same name, it will open a dialog window where you can choose what to do with the file: **Recover and replace** the file on the disk, **Do not recover** (to keep the file on the disk), and **Recover, but keep both files** (the recovered file will be renamed). If you want to use the choice for all files with identical names, select the **Apply to all files** check box.

*It is impossible to **Recover and replace** files on the disk which are being used or locked by the operating system at the moment of recovery.*

Search

You can search for a file you want to recover. To perform search, select on the folder tree the partition from which the file was backed up and then enter the file's name (or a partial name) in the search field with the magnifying glass icon to the right of the field. The search is performed only among the files backed up from the currently selected partition. The found files, if any, will be shown in the right pane under the **Search results** item at the bottom of the folder tree.

5.4.2 Selecting a version to recover

By default Acronis True Image Home 2011 Online Backup selects the latest versions with respect to the date you specified. However, for any file you can select a specific version of the file to recover.

To recover a specific file version:

- In the folder contents pane, select the file whose version you want to recover, then right-click and choose **View Versions** in the shortcut menu

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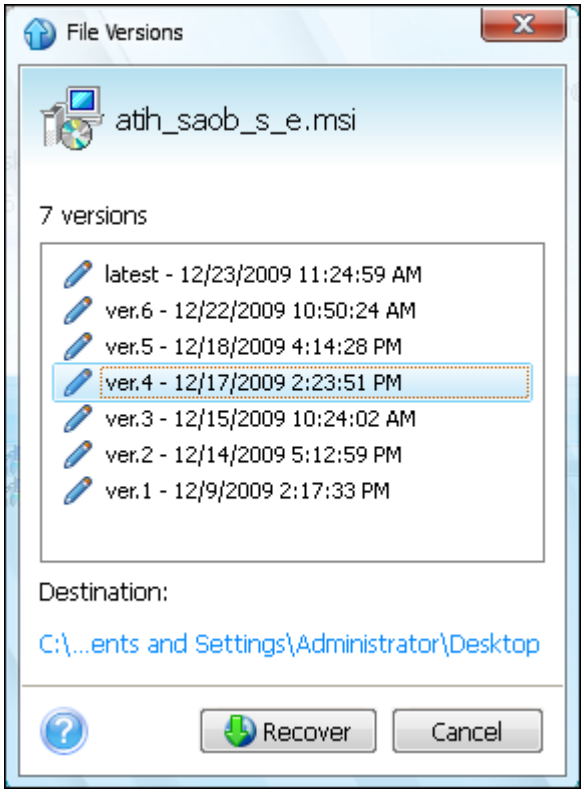
- In the **File Versions** dialog window that appears, select a version, and then click **Recover**, or simply drag the version to a destination in Windows Explorer



To remove a file version from the storage, select the version and click the **Remove** icon (cross) to the right of the version number.

To exit the window without recovering, click **Cancel**.

5.4.3 Recovery operation progress

Once you start recovery of the selected files, the recovery progress window appears.

In this window Acronis True Image Home 2011 Online Backup shows the approximate recovery time and data transfer speed.

The progress bar indicates the level of recovery completion.

If you want to see the recovered files and/or folders, select the **Show the folder content after the recovery is complete** check box. When the recovery finishes, Acronis True Image Home 2011 Online Backup will open the folder with the recovered items.

You can stop the recovery operation by clicking **Cancel**. The recovery operation will be canceled, but if you have started recovery of several files, the already recovered files will remain in the destination folder.

You can also close the progress window by clicking **Hide**. The recovery will continue, but you will be able to close the main program window. The program will continue working in the background and will automatically close once the recovery is finished.

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5.5 Removing data from Online Storage

Because the available space on Acronis Online Storage is limited, you need to manage your Online Storage space by cleaning up the obsolete data or the data you do not need anymore. Cleanup can be done in a variety of ways. The most "drastic" one is removing a computer registered on the Online Storage. Removing a computer results in deleting all data that was backed up from that computer. Therefore, such an operation must be carried out with caution. To remove a computer, right-click on its tab on the main screen and select **Remove from Online Storage**, then click **Yes** in the confirmation window.

The Online backup options provide for automatic cleanup of the Online Storage. You can specify deletion of files that have been kept on the storage longer than the specified number of months or days. In addition, you can set the maximum number of file versions to be kept on the Online Storage. You can accept the default settings for those options or set the values you need. To change the above options, click **Options** → **Settings** on the toolbar, and then select the **Storage cleanup** item. For more information see Storage cleanup (p. 111).

You can also manage Acronis Online Storage by deleting individual files or even some of their versions. Such deletions can be done only for the current computer.

1. Select the folder containing the files you want to manage on the directory tree in the left pane. The right pane lists the files in that folder.
2. If you want to delete a file, select it in the right pane. When selecting multiple files for deletion you can use the **Ctrl** and **Shift** keys like in Windows Explorer. Having finished selection, right-click on the selection and choose **Delete** in the shortcut menu, then click **Yes** in the confirmation window.
3. If you want to delete some versions of a specific file, right-click on the file and select **View Versions** in the shortcut menu. This opens the **File Versions** window. Select the version you want to delete, click the Delete icon (×) to the right of the version number, then click **Yes** in the confirmation window. Repeat this for all file versions you want to delete. Having finished deleting the versions, click **Cancel** to close the window.

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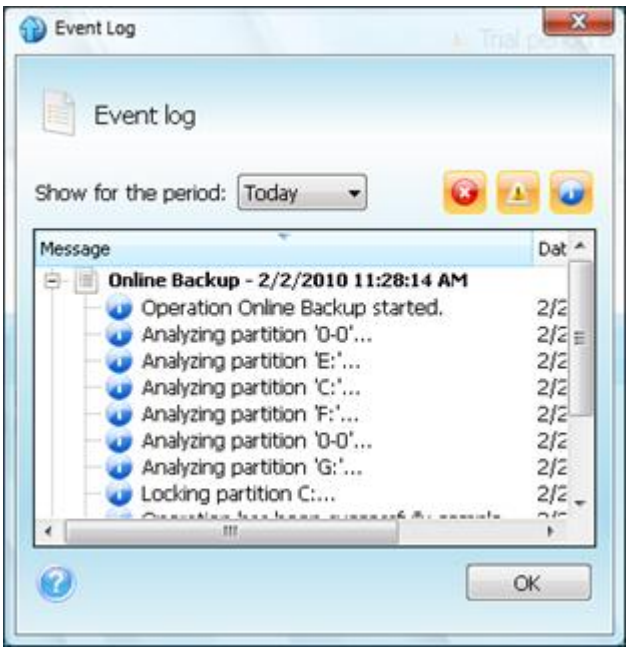
5.6 Viewing Log

If you want to view the log of Acronis True Image Home 2011 Online Backup operations, click **Help** → **Event Log** in the upper right corner of the main window.



To view the logs for a specific period, select the period from the drop-down list. You can select **Today**, **Week**, and **Month.** To view all logs, select **Show all**.

To delete a log entry, select it, right-click and select **Delete** in the shortcut menu. To delete all log entries, select **Delete all**. You can also save a log entry to file by selecting **Save**. To save all logs to file, select **Save all**.

The three buttons to the right control event filters: the white cross in the red circle filters error events, the exclamation mark in a yellow triangle filters warnings, and the "i" in the blue circle filters information message events.

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6 Useful information

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6.1 Protecting your system and data

To protect your system and data, please take the necessary precautionary measures:

1) To protect your system from a disaster, you need to make a full backup of your system. To make this task easier, Acronis has provided the One-Click Backup feature. It allows you to back up the system partition when you first start the newly installed program. If you decide not to use the One-Click Backup, make a system backup as soon as possible.

2) Whenever possible, you should store your system image on a hard drive other than your primary hard disk C:, preferably on an external one. This gives an additional guarantee that you will be able to recover your system if your primary hard disk drive fails. Furthermore, it is usually better to keep your personal data separate from your operating system and applications, for example, on disk D:. Such arrangement speeds up the creation of your system and data disk (or partition) images. It also reduces the amount of information you will need to recover. This makes the backup file of your system partition much smaller and recovery easier. The smaller the backup file, the less chance it will be corrupted and the less time required to recover your system.

3) If you store your data (documents, videos, photos, etc.) on a non-system disk, e.g. using the arrangement described in item 2), it needs to be backed up too. You can either back up the folders containing your data or create a data disk image. Remember that the imaging procedure is much faster than copying files. It could speed up the backup process significantly when backing up large volumes of data. If the image file becomes corrupted for some reason, it is sometimes possible to mount the image. You may be able to save most files and folders by copying them from the mounted image using Windows Explorer.

4) Because recovery of your system after a crash in most cases will be done after booting from the rescue media, you **must** create the rescue media (see Creating bootable rescue media (p. 153)) and then test it as described in Testing bootable rescue media (p. 129).

Backing up your system partition

If you want to use your external drive for storing the backup, attach and power it on before starting Acronis True Image Home 2011.

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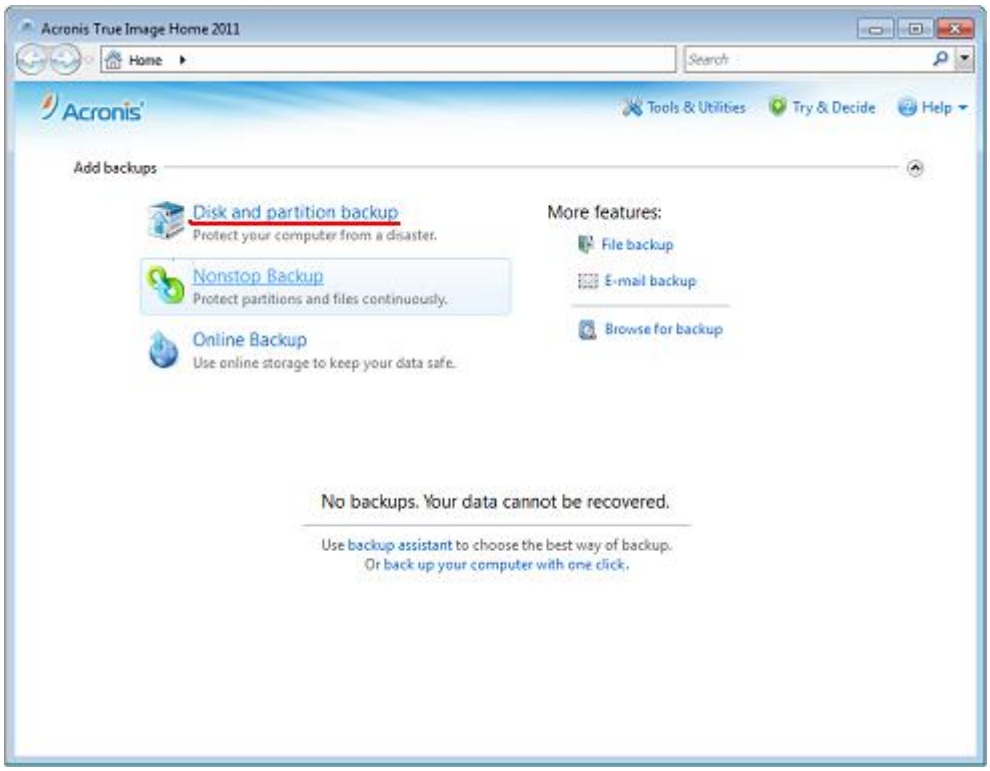
1. Start Acronis True Image Home 2011 and then click **Disk and partition backup** in the main window.



2. This opens the **Disk Backup** window with your system partition (usually C:) selected by default.

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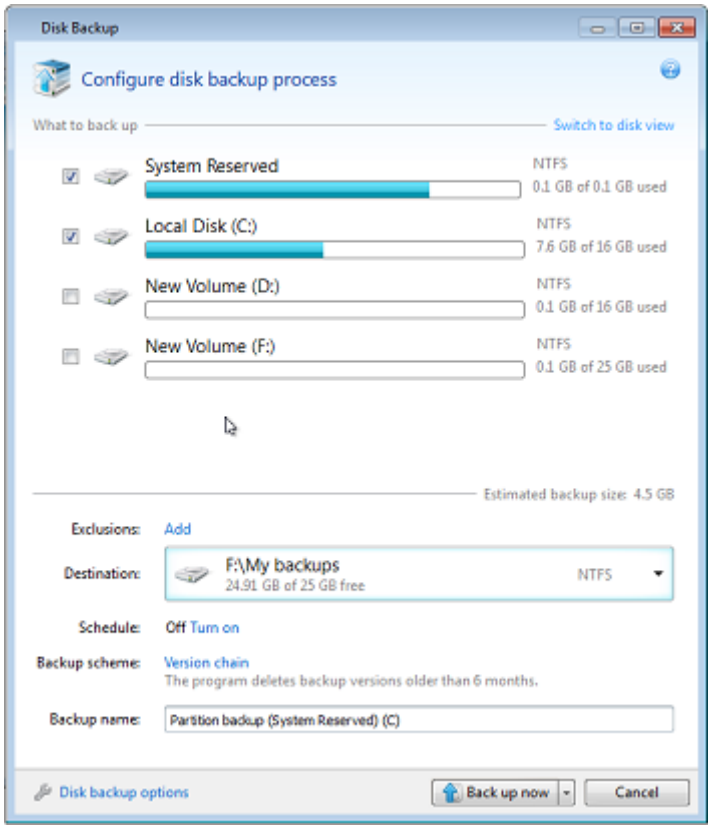
If you use Windows 7, the program will also select the System Reserved partition. Do not clear its check box, because you may need to recover that partition if your system crashes.



3. Select a destination for backup (you can leave the default destination or browse for a destination after clicking the down arrow to the right of the current destination and selecting **Browse...**).
4. Click **Back up now**.

Additional recommendations

1) Many IT professionals recommend that you have at least two copies of your system backup (three are even better). It is further recommended to keep one copy of a backup in a different location from the other (preferably on other premises – for example, at work or at a friend's home, if you use the backed up computer at home). One more argument in favor of several backups: when starting recovery, Acronis True Image Home 2011 deletes the target partition (or disk). If you have just a single backup, you are at great risk. The moment the system partition is deleted on the computer being recovered the only thing you have is the image being recovered. If the image is corrupted, you will not be able to recover the system.

2) If you have only one computer at home, it is advisable to print some information that may be helpful in recovering from a disaster, because you may not be able to use the Internet. We recommend to print the following sections: "Recovering your system after a crash", "Recovering partitions and disks", and "Recovering to different hardware". Keep the printed material in a safe place along with the rescue CD/DVD or another rescue media.

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6.2 Preparing for backups

If you would like to create your own backup strategy, you will need to consider at least the following issues: where to store your backups, what data to back up and how often. The below sections will discuss these issues in detail.

Incidentally, it would be a good idea to make some additional preparations before carrying out any backup, especially image backups. It is advisable to scan the system for viruses and malware to ensure that the backup does not contain any "surprises". In addition, you may want to perform disk defragmentation before backing up that disk.

6.2.1 Deciding where to store your backups

First of all you should decide where to store your backups. Acronis True Image Home 2011 supports quite a few of storage devices. For more information see Supported storage media (p. 13). Some of the supported storage locations are discussed below.

Hard disk drives

Since hard disk drives are now quite inexpensive, in most cases purchasing an external hard drive for storing your backups will be an optimal solution. An external drive enhances the security of your data because you can keep it off-site (for example, at home if you back up your office computer and vice versa) You can choose various interfaces – USB, FireWire, eSATA depending on the configuration of your computer ports and the required data transfer rate. In many cases the best choice will be an external USB hard drive, especially if your computer supports USB 3.0.

If you plan to use an external USB hard drive with your desktop PC, connecting the drive to a rear connector using a short cable will usually provide the most reliable operation. This reduces the chance of data transfer errors during backup/recovery.

Home file server, NAS or NDAS

If you have a Gigabit Ethernet home network and a dedicated file server or NAS, you can store backups on the file server or NAS practically like on an internal drive.

If you decide to use an external hard drive, NAS, NDAS, etc., you will need to check whether Acronis True Image Home 2011 detects the selected backup storage. You need to check this both in Windows and when booted from the rescue media.

To gain access to an NDAS enabled storage device, in many cases you will need to specify the NDAS device ID (20 characters) and the write key (5 characters). The write key allows you to use an NDAS enabled device in write mode (e.g. for saving your backups). Usually the device ID and write key are printed on a sticker attached to the bottom of the NDAS device or on the inside of its enclosure. If there is no sticker, you need to contact your NDAS device vendor to obtain that information.

Optical discs

Blank optical discs such as DVD-R, DVD+R are very cheap, so they will be the lowest cost solution for backing up your data, though the slowest one. This is especially true when backing up directly to DVDs. Furthermore, if your backup consists of several DVDs, data recovery from DVDs will require a lot of disc swapping. On the other hand, using Blu-ray discs may be a viable option.

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Due to the necessity of swapping discs, it is strongly recommended to avoid backing up to DVDs if the number of discs is more than three. When there is no alternative to backing up to DVDs, we recommend to copy all DVDs to a folder on a hard disk and then to recover from that folder.

Acronis Online Backup

Acronis True Image Home 2011 allows you to use Acronis Online Backup service for safeguarding your most important files by saving them to a secure remote location. Because files are stored on a remote storage, they are protected even if your computer gets stolen. So the risk of data loss as a result of fire, theft, or other natural disasters is practically eliminated. If something happens to your backup image, PC, or external storage device, you can get your most important files back.

6.2.1.1 FTP connection

Acronis True Image Home 2011 allows you to store your backups on FTP servers.

When saving backups on an FTP server, you should provide:

- Full path to the backup file (including .tib extension), for example: *ftp://my.server.com/myfolder/mybackup.tib*
- Port
- User name
- Password

To check your settings click the **Test connection** button. The computer will try to connect to the specified FTP server. If the test connection has been established, click the **Connect** button to add the FTP connection.

Please, be aware that the mere opening of an FTP server's root folder does not bring you to your home directory.

An FTP server must allow passive mode file transfers. For data to be recovered directly from an FTP server, the backup must consist of files no greater than 2GB each.

*The firewall settings of the source computer should have Ports 20 and 21 opened for the TPC and UDP protocols to function. The **Routing and Remote Access** Windows service should be disabled.*

6.2.1.2 Authentication settings

If you are connecting to a networked computer, in most cases you will need to provide the necessary credentials for accessing the network share.

If you need to specify the user name and password:

- Select the **Use NT authentication** check box and enter the logon credentials:
  - **User name** - enter a user name
  - **Password** - enter the user's password

When you click the **Test connection** button, the computer will try to connect to the selected network share. If you receive an error message, check if the credentials are correct and provide the correct user name and password for the selected network share. To repeat the connection attempt, click the **Test again** button.

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If you clear the **Use NT authentication** check box, the computer will try to log on automatically with the credentials used for logging on to Windows.

Having provided the required information, click **Connect**.

6.2.2 Deciding what data to back up

Operating systems and application software become ever larger (for example, Windows Vista x64 requires 15GB of free space on a hard disk). It will take you several hours to reinstall your operating system and application software from original CDs or DVDs on a new hard disk.

Furthermore, the practice of buying application software by downloading from the Internet is becoming more and more popular. If you lose your registration information, which is usually sent by e-mail, you may have problems with restoring your right to use the application.

So making a backup of your entire system disk (making a disk image) will save you a lot of valuable time in case of a disaster. It will also safeguard you against other possible problems.

Backing up the entire system disk takes more disk space, but enables you to recover the system in minutes in case of a system crash or hardware failure. Moreover, the imaging procedure is much faster than copying files.

Because images can save you a lot of time when you need to recover the operating system or data, we recommend that you make them part of your backup strategy.

If you have multiple partitions on a drive, it is advisable to include all of them in the image. Failure of the hard drive in most cases will mean that all the partitions it contains also fail.

Although we strongly recommend you to create images of your hard disk on a regular basis, it should only be a part of a reliable backup strategy.

Do you have bank records, family photos, videos, etc. you accumulated on your computer for several years? Hardware and software can be replaced; your personal data cannot, because it is unique. So you should also safeguard your personal data using file and folder backups. This is true even if your image backup contains that data.

After the initial full backup, file backups usually take little time to run, making it easy to back up your data once (or even several times) a day. This ensures that your most recent backup is never more than a day old. But file and folder backups alone are not sufficient for two main reasons:

1) If your startup hard drive completely fails, you will not be able to do any work until you've replaced it; and 2) Reinstalling an operating system and applications from their original CDs or DVDs is a lengthy and tedious procedure. You could avoid it with an image of your hard disk.

Summing up the above, the optimal backup strategy for most users will consist in backing up both the system disk (or at least the system partition) and personal data. To facilitate implementation of this strategy, Acronis True Image Home 2011 provides the Acronis One-Click Backup (p. 18) feature. By default Acronis One-Click Backup backs up both your system partition and your personal data.

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6.2.3 Deciding how often to back up

Disk and partition backups

Let's first discuss backing up your system disk. Since it is impossible to know when it may crash, you must create the first system disk backup as soon as possible. Then you can decide how often to "refresh" that backup. You may also want to add new backups without deleting the old one, if you have available space on the storage device used for backups. Having several backups increases the chances of recovering your system in case of a disaster. A single backup may turn out to be corrupted and system recovery will be impossible.

The timing of subsequent system disk backups depends on how often you install new applications, updates, etc. In many cases it is sufficient to schedule a new system backup once a month. You may first try to schedule incremental backups and then have a look at the incremental backup size after the next backup runs. If the size is comparable to that of the initial full backup, it makes sense to create only full backups. Recovery from a full backup takes less time than from a backup chain that includes a full backup and several incremental ones. Furthermore, corruption of an incremental backup in a chain renders the later backups in the chain useless. For more detailed information see Full, incremental and differential backups (p. 36).

In Windows Vista and Windows 7 incremental or differential backups may become large because these operating systems by default perform such background tasks as defragmentation, indexing, etc. Those tasks change file locations on the disk. Incremental backups reflect the changes as they include the sectors changed since the previous backup.

If you like trying new applications, games and utilities, it is advisable to have a backup of your "clean" system. It is made after installing only Windows and "must have" applications, e.g. Microsoft Office, an antivirus product, favorite utilities, etc. Thereafter you will always be able to recover this clean system with the clean registry after you finish experimenting with new software.

Scheduling the system disk backups does not prevent you from adding unscheduled backups when needed. The new user interface allows you to accomplish this task very easily. You just need to select the system disk backup box in the main program window and then click **Back up now**. This may be useful, for instance, before installing a major Windows update or Service Pack.

Data backups

The current version of Acronis True Image Home 2011 allows you to protect individual folders with Acronis Nonstop Backup. Thus you can continuously protect your personal data. As you protect only data files, the backup size in many cases will not be excessively large. You will be able to keep the history of your file changes over a long period.

Of course, you can also run your file backups manually or on a schedule, if you do not want to use Acronis Nonstop Backup. In this case the frequency of backups will depend on how often you make changes in the files being backed up or add new files. For instance, when you are working on a project day after day, you will likely need to schedule a backup of your daily work results at the end of every day.

For additional safety you can back up your most important files on a remote storage using Acronis Online Backup. Such backups can run on a schedule too, for instance, every night when you do not use the computer.

Music files (mp3, ogg, etc.) and photos (jpg, jpeg, etc.) are already compressed, so backing them up as tib files will not result in a significant saving of disk space. You may want to back up such files in

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their native format by copying them using Windows Explorer. If those files are important to you, Acronis True Image Home 2011 has the Reserve backup copy feature. It can back up the same data files both in tib format and in native format to two different backup locations. You can schedule such backups as needed, for instance, on weekly basis if you regularly download new music files.

Backup schemes

The current Acronis True Image Home 2011 version has predefined backups schemes for both disk and file backup types. To manage your backups, in many cases you can just select a desired backup scheme and the program will do all the rest. For more information see Backup schemes (p. 53).

6.3 Testing bootable rescue media

To maximize the chances of your computer's recovery if need arises, you must test that your computer can boot from the rescue media. In addition, you must make sure that the recovery media contains all drivers required for operation of your mass storage devices and network adapter.

If you purchased a boxed version of the product that has a bootable CD, please test this CD.

To test the rescue media:

1) Configure your computer so as to enable booting from the rescue media and make your rescue media device (CD-ROM/DVD-ROM drive or USB stick) the first boot device. See Arranging boot order in BIOS (p. 89).

If you have a rescue CD, press a key to start booting from the CD, as soon as you see the prompt “Press any key to boot from CD”. If you fail to press a key within five seconds, you will need to restart the computer. When using other rescue media, the procedure will be similar.

2) After the computer boots into the recovery environment, choose Acronis True Image Home 2011 (full version) in the boot menu.

3) When the program starts, make sure that it detects all the hard drives you have in your system. Also, check external drives if you use them for storing backups. You must attach the external drive(s) before booting from the rescue media. Otherwise, the recovery environment might not detect the drive(s).

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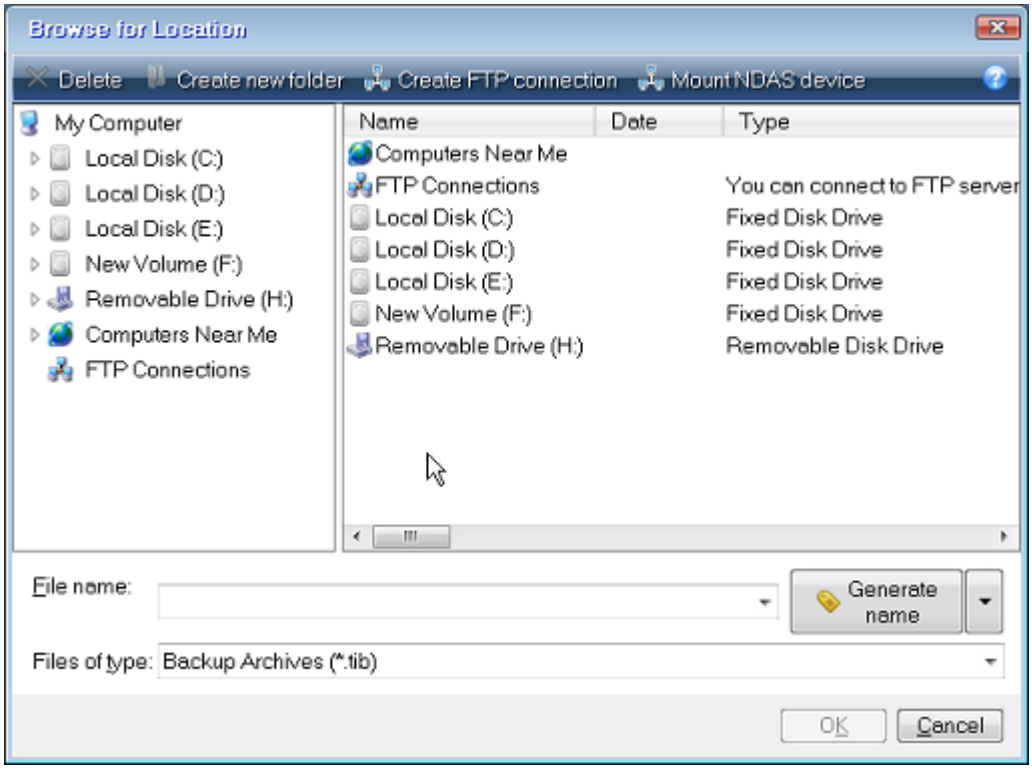
To check the drives, start Backup Wizard by clicking **My Disks** below Back Up on the Welcome screen. Select a disk to back up at the **What to back up** step and click **Next**. Click the **Browse** button to the right of the **Backup location** field. When the **Browse for location** window opens, check that all your drives are shown under **My Computer**. Having checked the drives, click **Cancel** to close Backup Wizard.



4) If you store your backups on the network, you should also check that you can access the network in the recovery environment. This is necessary because when booted from the rescue media, Acronis True Image Home 2011 might not detect the network.

If no computers are visible on the network, but the **Computers Near Me** icon is found under **My Computer** (see the screen shot), ensure that a DHCP server is running on your network. If you don't use a DHCP server, specify network settings manually in the window available at **Tools & Utilities** → **Options** → **Network adapters**.

If the **Computers Near Me** icon is not available under **My Computer**, there may be problems either with your network card or with the card driver provided with Acronis True Image Home 2011.

6.3.1 Selecting video mode when booting from the rescue media

When booting from the rescue media the optimal video mode is selected automatically depending on the specifications of your video card and monitor. However, sometimes the program can select the wrong video mode, which is unsuitable for your hardware. In such case you can select a suitable video mode as follows:

1. Start booting from the rescue media. When the boot menu appears, hover the mouse over Acronis True Image Home 2011 (Full version) item and press the F11 key.

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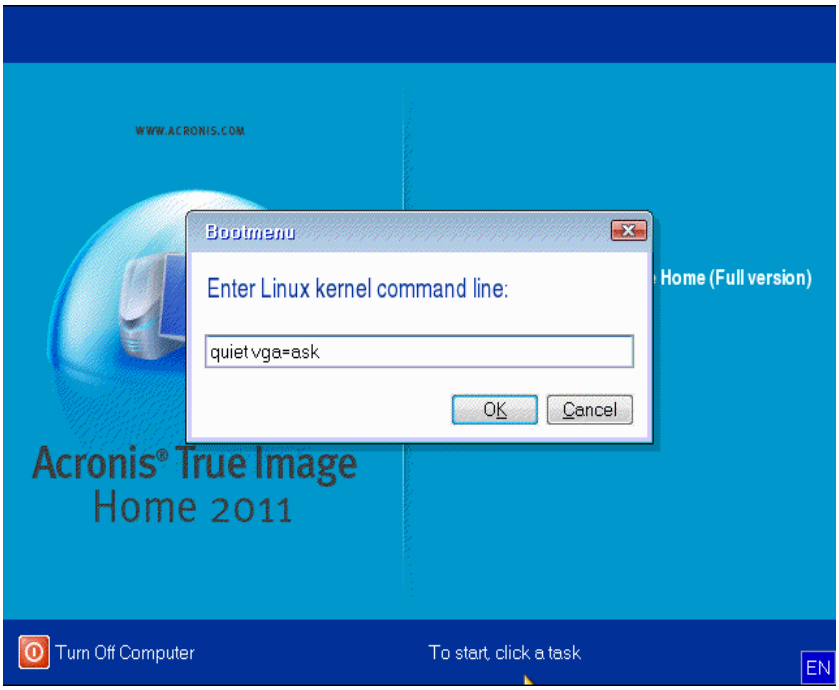
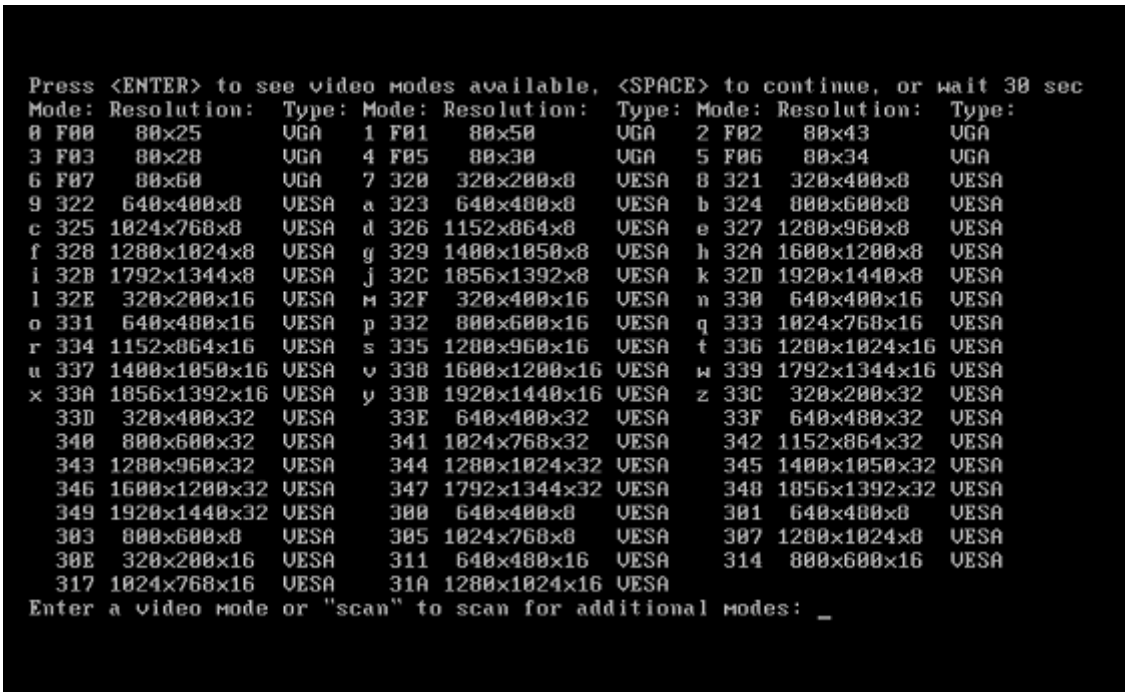
2. When the command line appears, type "vga=ask" (without quotes) and click **OK**.



3. Select Acronis True Image Home 2011 (Full version) in the boot menu to continue booting from the rescue media. To see the available video modes, press the Enter key when the appropriate message appears.
4. Choose a video mode you think best suitable for your monitor and type its number in the command line. For instance, typing 338 selects video mode 1600x1200x16 (see the below figure).



Incidentally, when there is a digit or letter before a three-digit number, you can also select such video mode by typing the corresponding single digit or letter ("v" in our instance).

5. Wait until Acronis True Image Home 2011 (Full version) starts and make sure that the quality of the Welcome screen display on your monitor suits you.

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To test another video mode, close Acronis True Image Home 2011 and repeat the above procedure.

After you find the optimal video mode for your hardware, you can create a new bootable rescue media that will automatically select that video mode.

To do this, start Acronis Media Builder, select the required media components, and type the mode number with the "0x" prefix (0x338 in our instance) in the command line at the "Bootable media startup parameters" step, then create the media as usual.

6.4 Testing that your backups can be used for recovery

Here are some recommendations:

1) Even if you start recovery of the active partition in Windows, the program will reboot into the Linux environment after the recovery process starts. This is because Windows cannot be left running during the recovery of its own partition. So you will recover your active partition under the recovery environment in all cases.

If you have a spare hard drive, we strongly recommend you to try a test recovery to this hard drive. It should be done after booting from the rescue media which uses Linux.

If you do not have a spare drive, please, at least validate the image in the recovery environment. A backup that can be read during validation in Windows, **may not always be readable under Linux environment**.

When you use the Acronis True Image Home 2011 rescue media, the product creates disk drive letters that might differ from the way Windows identifies drives. For example, the D: disk identified in the standalone Acronis True Image Home 2011 might correspond to the E: disk in Windows. It is advisable to assign unique names (labels) to all partitions on your hard drives. This will make finding the disk containing your backups easier.

2) When booted from the rescue media, it may also be useful to complete all the steps in the Recovery Wizard right up to the Summary screen, but not click the **Proceed** button. This will allow you to simulate the recovery process.

You will also make sure that Acronis True Image Home 2011 recognizes both the drive containing your backups and the target drive.

After completing all the Recovery Wizard's steps click **Cancel** on the Summary screen. You may repeat this until you feel sure of your settings and choices.

3) Users of the Enterprise and Ultimate editions of Windows 7 can now test whether they will be able to boot from the recovered system partition. Acronis True Image Home 2011 allows booting from a tib file containing a system partition image. So if you are able to boot from such backup, you almost certainly will be able to boot after an actual system recovery from that backup.

When you choose a tib file to boot from, Acronis True Image Home 2011 temporarily converts it to a vhd file. Your hard disk must have enough free space for storing it. The program will then add a new item to the Windows boot loader list. When you select the tib file in the boot loader list, your computer will actually boot from that temporary vhd file. After ensuring that the tib file will boot, you can remove the file from the boot loader list and delete the temporary vhd file.

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6.5 Trying system changes safely

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6.5.1 What is Try&Decide

The Try&Decide feature allows you to create a secure, controlled temporary workspace on your computer without requiring you to install special virtualization software. You can perform various system operations without worrying that you might damage your operating system, programs or data.

After making virtual changes, you may apply them to your original system. If you make changes that you want to keep, you might want to commit those changes to the system. Among the operations you may attempt with this feature is to open mail attachments from unknown senders or visit websites that might contain potentially troublesome content.

For example, if you visit a website or open an email attachment that puts a virus on your temporary duplicate, you can simply destroy the duplicate and no harm will be done – the virus will not appear on your machine.

It is important to remember that if you download e-mail from a POP mail server, create new files or edit existing documents while in the Try mode and then decide to discard your changes, those files, document changes, and mail will no longer exist. If you use POP email, make sure to change the settings in your e-mail to leave your mail on the server before *you activate the Try mode. This way, you can always retrieve your email again. Similarly, save new files and/or edited documents to a drive not protected by Try&Decide.*

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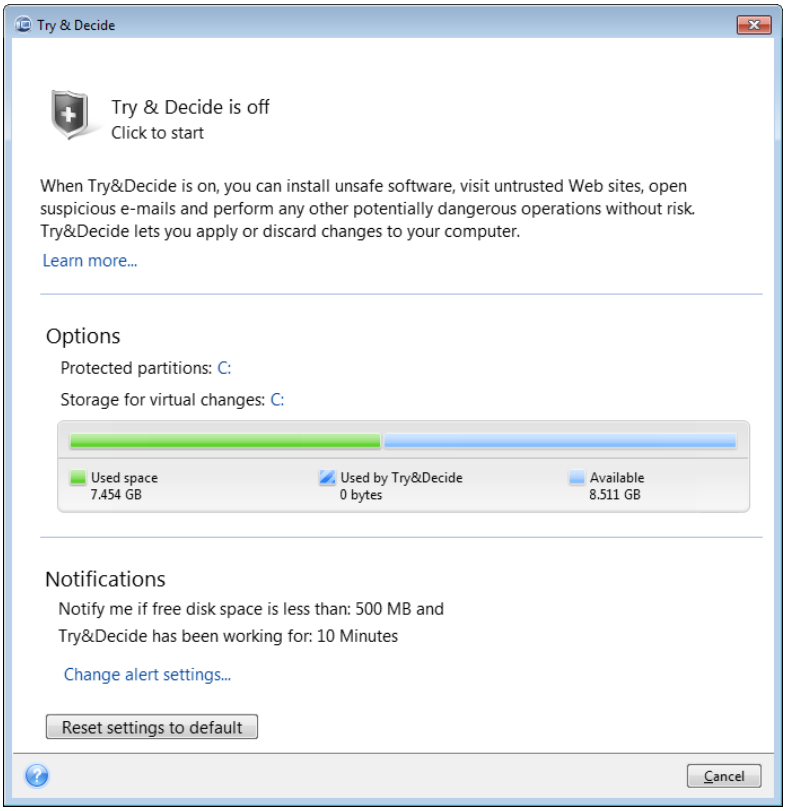
After starting Try mode you can safely install any system updates, drivers and applications without worrying about what might happen to your system. If anything goes wrong, you can simply discard the changes made in the Try mode.


Try & Decide
Try & Decide is off
Click to start
When Try&Decide is on, you can install unsafe software, visit untrusted Web sites, open suspicious e-mails and perform any other potentially dangerous operations without risk. Try&Decide lets you apply or discard changes to your computer.
Learn more...
Options
Protected partitions: C:
Storage for virtual changes: C:
Used space
7.454 GB
Used by Try&Decide
0 bytes
Available
8.511 GB
Notifications
Notify me if free disk space is less than: 500 MB and
Try&Decide has been working for: 10 Minutes
Change alert settings...
Reset settings to default
Cancel

One of the best features of Try&Decide is that it isolates your "real" operating system from changes to the temporary operating system duplicate made by updates. Should you find any kind of incompatibility, you can easily revert your system to the initial state, which was not changed when the update was applied.

Because of this, you can safely install system updates when they appear. When Windows Update informs you that updates for the system and Microsoft applications are ready for installation, turn on the Try&Decide and then proceed to install the updates. If you encounter any sort of problem, discard the changes and leave your real operating system and applications untouched.

You can leave the Try&Decide turned on as long as you like, since this mode "survives" across reboots of your operating system.

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When your computer reboots for whatever reason while working in the Try mode, before booting of the operating system starts, you will be shown a dialog offering you two choices – stop the mode and discard changes or continue working in the mode. This will allow you to discard the changes that have resulted in a system crash. On the other hand, if you reboot, for example, after installing an application, you can continue working in the Try mode after starting Windows.

Continue in the mode
Start Windows and continue working in the Try mode
Stop and discard
Stop the Try mode and discard all changes that have been made since
Acronis®
Try & Decide™
Turn Off Computer
Continue Windows booting in 6 seconds...
EN

The moment comes eventually when you decide to turn the mode off. After clicking the Try&Decide icon, the program will show a dialog where you should decide what to do with the changes to your system made in the Try mode - apply or discard:

Choosing **Apply changes** will allow you to keep the changes made to the system, and choosing **Discard changes** will return your system to the state it was in before turning on the Try&Decide. Choosing **Apply changes with reboot** will speed up applying the changes.

Limitations in using Try&Decide

You can leave the Try&Decide turned on as long as you like (maybe days on end, however in such case applying changes may take a long time).

If you use Windows Vista or Windows 7, please, be aware that in the Try mode the program may use free disk space quite intensively, even when your computer is idle. This is due to housekeeping activities such as indexing that run in the background.

Please note that while working in the Try mode you will experience slowing down of the system performance. Furthermore, the process of applying changes could take considerable time.

Please be aware that Try&Decide cannot track changes in disk partitions, so you will be unable to use the Try mode for virtual operations with partitions such as resizing partitions or changing their layout. In addition, you must not use the Try&Decide and disk defragmentation or disk error checking utilities at the same time, because this can irreparably corrupt the file system, as well as make the system disk unbootable.

When the Try mode is started, you won't be able to use the previously activated Acronis Startup Recovery Manager. Rebooting the computer in the Try mode will allow you to use Acronis Startup Recovery Manager again.

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Try&Decide and Nonstop Backup cannot work simultaneously. Starting the Try mode suspends Nonstop Backup. Nonstop Backup will resume after you stop the Try mode.

6.5.2 Starting the Try mode

To start the Try mode:

- Click **Try & Decide** in the main program menu.
- Set up the Try&Decide options:
  - Protected partitions (p. 137)
  - Storage for virtual changes (p. 137)
  - Alert settings (p. 137)
- Start the Try mode by clicking the Try & Decide icon. The program starts tracking all changes made to the OS and files and temporarily stores all the changes on the selected disk.

Every "soft" reboot of your computer while in the Try mode will result in adding up to 500 MB of Try&Decide's housekeeping data into the storage selected for storing virtual changes. This data will be added even if the protected partition has not changed between reboots.

Having performed all the changes you wanted to try, click the Try & Decide icon again to turn off the Try mode. The program will ask if you want to apply or to discard the changes.

Acronis True Image Home 2011 will track changes until the disk space in the location selected for storing virtual changes remains sufficient for applying the changes if you choose to apply them. Then the program will alert you that the time has come to make a decision on whether to apply or discard the changes made so far. If you choose to not heed the alert message, the program will automatically restart the system when the disk is full, discarding the changes in the process of rebooting. At that point, all changes will be lost.

6.5.3 Stopping the Try mode

When you decide to turn the mode off, click the Try & Decide icon in the **Try & Decide** window.

Select **Apply changes** if you want to keep the changes made to the system.

Select **Apply changes with reboot** if you want to speed up the applying process. When you click the button, Try&Decide restarts your computer and applies the changes during the reboot.

Select **Discard changes** if you want to return your system to the state it was in prior to turning on the Try mode.

*If you have chosen **Discard Changes** and rebooted the computer with multiple operating systems installed, you won't be able to boot other operating systems except the one used for working in the Try mode. A second reboot will recover the original MBR and make other operating systems bootable.*

6.5.4 Try&Decide options and notifications

To view or edit the default options of the **Try&Decide** feature, select **Tools & Utilities** -> **Try&Decide** on the toolbar. The options and notifications will be displayed in the corresponding areas of the main window.

You can change the following Try&Decide options and notifications:

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- **Protected partitions:** specify the partitions you want to protect from unauthorized changes during a Try&Decide session. By default, T&D protects the system partition (Disk C), though you may add other partitions or disks in your system.
- **Storage for virtual changes:** specify where Try&Decide will store information about virtual changes to your system. By default, T&D saves the information to a free space on Disk C. You can also choose as such place Acronis Secure Zone or another logical disk or hard drive.

  When choosing to protect more than one partition, you cannot select one of the partitions to be protected to store virtual changes. In addition, you cannot select an external hard disk drive.

- **Notifications** – specify whether Try&Decide should alert you when it uses up all the space allotted for saving virtual changes and after a specified time period has passed. By default all notifications are **On**. To change the default settings, click **Change alert settings....**

Note, that after configuring the settings, you will always be able to recover their default values. To do so, click the **Reset settings to default** button.

6.5.4.1 Protected partitions

Specify the partition or partitions you want to protect from unauthorized changes during a Try&Decide session. By default, Try&Decide protects Disk C, though you may choose to protect any other partition(s) in your system.

To select a partition:

- Check the corresponding partition box. To select the entire disk, you must select all its partitions.
- Click **OK**.

6.5.4.2 Storage for virtual changes

Specify the partition you want to use as a storage for virtual changes that will appear during a Try&Decide session. By default, Try&Decide saves the information to a free space on Disk C. You can also choose as such place Acronis Secure Zone or another logical disk or hard drive.

When choosing to protect more than one partition, you cannot select one of the partitions to be protected to store virtual changes. In addition, you cannot select an external hard disk drive.

To select a partition:

- Click on the partition you want to store virtual changes on
- Click **OK**

6.5.4.3 Alert settings

Specify whether Try&Decide should alert you when it uses up all the space allotted for saving virtual changes and after a specified time period has elapsed. By default the Alert is On.

The following options are available:

- **On free disk space remaining** - using this option, the program automatically checks the amount of free space left on the disk used by Try&Decide with values that you specify. If the amount of free space becomes less than the specified value, the program displays a notification message.
- **On time elapsed since Try&Decide started:** - using this option, the program will notify you if T&D has been working for longer than the period of time you specified.

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Having specified the alert settings, click **OK**.

6.5.5 Try&Decide: typical use cases

The Try&Decide feature can help you in various circumstances, for example:

Software testing

There are known cases when installation of antivirus software cripples functionality of some applications or they may even refuse to launch after antivirus installation. The Try&Decide utility can help you to avoid such a problem. You may proceed as follows:

- Download a trial version of the antivirus software from the Web site of the vendor whose product you wish to try.
- Turn on the Try mode.
- Install the antivirus software
- Try to work with the applications installed on your computer performing your usual tasks.
- If everything works without any snags, you can be reasonably sure that there will be no incompatibility problems and can buy the antivirus software.
- If you encounter any problems, discard the changes in your system caused by installing the antivirus and try antivirus software from another vendor. The new attempt might turn out to be successful.

File recovery

You have accidentally deleted some files and then emptied the Recycle Bin. Then you have remembered that the deleted files contained important data and now you are going to try to undelete them using the appropriate software. However, sometimes you may do something wrong while trying to recover deleted files, making things worse than before trying to recover them. So you can proceed as follows:

- Turn on the Try mode.
- Launch the file undelete utility
- After the utility scans your disk in search of the deleted file or folder entries, it will present you the deleted entries it has found (if any) and offer you the opportunity to save whatever it can recover. There is always a chance that you might pick the wrong file and while recovering it the utility may overwrite the very file you are trying to recover. If not for the Try&Decide, this error would be fatal and the file would be lost irretrievably.
- But now you can just discard the changes made in the Try mode and make one more attempt to recover the files after turning on the Try mode again. Such attempts may be repeated until you are sure that you have done your best in trying to recover the files.

Software uninstalling

It is well known that the "Add or Remove Programs" component of the Windows Control Panel cannot give a complete guarantee of cleanly uninstalling applications. This is because most applications do not provide enough information for it to be able to uninstall them without a trace. So almost every time you install a trial program and then remove it, you have some garbage left on your computer and after a while Windows may get slower. Even use of special uninstaller utilities cannot guarantee complete uninstallation. The Try&Decide feature, however, will ensure complete and perfect uninstallation of any software quickly and easily. Here's how:

- Turn on the Try mode.

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- Install the software application you want to evaluate.
- Try using the application.
- When you want to uninstall it, just discard all the changes made to your computer in the Try mode.

This may come in handy not only for those who, for example, like to play a lot of games but for professional software testers as well – to use on their testing machines.

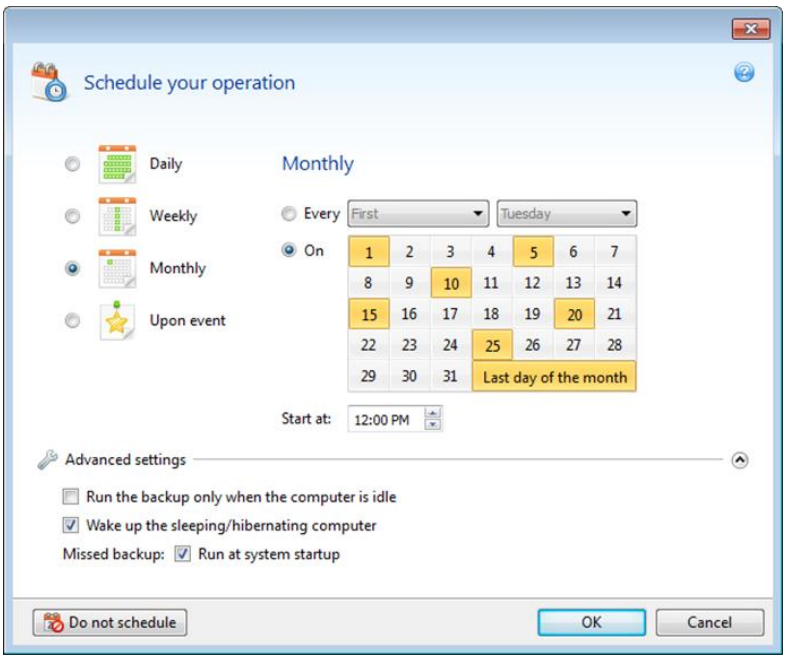
Web privacy

Suppose you do not want anybody to know, which Web sites you have visited or which pages you have opened - we all have the right to privacy. But the problem is that to make your Web surfing more comfortable and fast, the system stores this information and much more: cookies you have received, search engine queries you have made, URLs you have typed, etc. in special hidden files. And such information is not deleted completely when you clear your temporary Internet files, delete cookies, clear history of the recently opened Web pages using the browser's tools. So snoopers may be able to view the information using special software. Well, there are third-party programs that can wipe all your Internet activity tracks, but most of them will cost you money and time required for learning to use them. Now you have a much easier way – to use the **Try&Decide** feature.

Just make a couple of clicks to turn on the Try mode before launching your Internet browser. When you turn on the Try mode, the program creates a virtual disk. While the Try mode works, all changes to your system including those made by the system itself will be saved on this virtual disk. So you can surf the Web as you please. After you have finished using the browser, make a couple more clicks to discard the changes accumulated in the system in the Try mode and the system will be rebooted and reverted exactly to the state it was in prior to turning on the Try mode (including all those hidden files).

6.6 Scheduling

The **Scheduler** window allows you to specify the backup and validation schedule settings.



You can choose and set up one of the following backup or validation frequencies:

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- Daily (p. 140) - the operation will be executed once a day or more frequently.
- Weekly (p. 141) - the operation will be executed once a week or several times a week on the selected days.
- Monthly (p. 141) - the operation will be executed once a month or several times a month on the selected dates.
- Upon event (p. 141) - the operation will be executed upon an event.

Clicking the **Do not schedule** button turns off the scheduler for the current operation. In this case the backup or validation will run only when you click **Back up now** or **Validate backup** respectively in the main window.

Advanced settings

Clicking **Advanced settings** allows you to specify the following additional settings for backup and validation:

- To postpone a scheduled operation until the next time the computer is not in use (a screen saver is displayed or computer is locked), select the **Run the backup only when the computer is idle** check box. If you schedule validation, the check box will change to **Run the validation only when the computer is idle**.
- If you want to wake up the sleeping/hibernating computer to perform the scheduled operation, select the **Wake up the sleeping/hibernating computer** check box.
- If the computer is switched off when the scheduled time comes, the operation won't be performed. You can force the missed operation to run at the next system startup. To do so, select the **Run at system startup** check box.
- If you schedule a backup to a USB flash drive or validation of a backup that is located on a USB flash drive, one more check box appears: **Run when the current device is attached**. Selecting the check box will let you perform a missed operation when the USB flash drive is attached if it was disconnected at the scheduled time.
- **Run the backup upon HDD alarm** (available when Acronis Drive Monitor is installed) – if enabled, the backup will run as soon as there is an alarm on Acronis Drive Monitor about a potential problem with one of the hard disks in the backup source. Acronis Drive Monitor is a hard drive health monitoring utility based on information received from hard drive S.M.A.R.T. reports, Windows logs, and its own scripts.

Having finished scheduling, click **OK**.

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6.6.1 Daily execution parameters

You can set up the following parameters for daily operation execution:

- **Start time or periodicity**

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- If you select **At**, set the operation's start time. Enter hours and minutes manually, or set the desired start time using the up and down buttons. You can specify several start times by clicking **Add**.
- If you select **Every**, choose daily operation periodicity from the dropdown list (for example, every 2 hours).

Description of the **Advanced settings** see in Scheduling (p. 139).

6.6.2 Weekly execution parameters

You can set up the following parameters for weekly operation execution:

- **Week days**

  Select the days on which to execute the operation by clicking on their names.
- **Start time**

  Set the operation's start time. Enter hours and minutes manually, or set the desired start time using the up and down buttons.

Description of the **Advanced settings** see in Scheduling (p. 139).

6.6.3 Monthly execution parameters

You can set up the following parameters for monthly operation execution:

- **Periodicity or dates**
  - If you select **Every**, choose a numeral and the day of the week from the dropdown lists (example: First Monday - the operation will be performed on the first Monday of every month)
  - If you select **On**, choose the date(s) for operation execution (example: you may want the operation to be run on the 10th, 20th, and last day of the month)
- **Start time**

  Set the operation's start time. Enter hours and minutes manually, or set the desired start time using the up and down buttons.

Description of the **Advanced settings** see in Scheduling (p. 139).

6.6.4 Upon event execution parameters

You can set up the following parameters for the Upon event operation execution:

- **Event**
  - **User logon** – the operation will be executed each time the current user logs on to the OS.
  - **User logoff** – the operation will be executed each time the current user logs off the OS.
  - **System startup** – the operation will be executed at every OS startup.
  - **System shutdown** – the operation will be executed at every computer shutdown or reboot.
- **Additional condition**
  - If you want to run an operation only at the first occurrence of the event on the current day, select the **Once a day only** check box.

Description of the **Advanced settings** see in Scheduling (p. 139).

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6.7 Searching backups and their content

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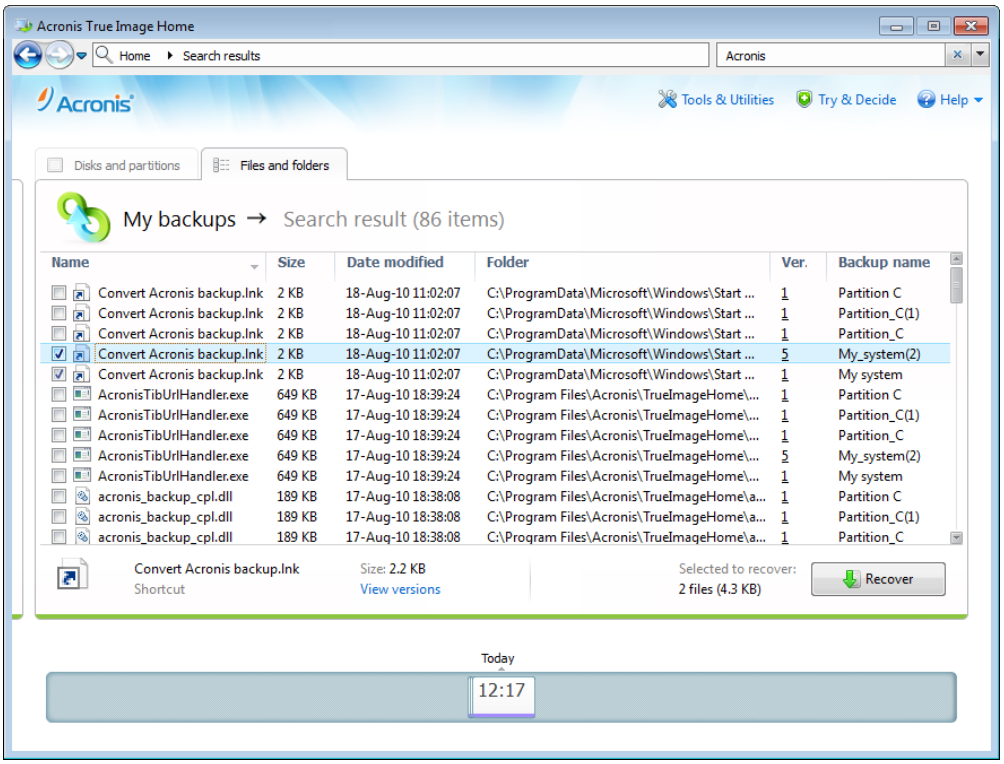
6.7.1 Searching

In addition to the ability to explore backups, Acronis True Image Home 2011 provides search for files in your backups.

Enter a search string into the Search field at the top right of the Acronis True Image Home 2011 window. You will be taken to the Acronis Backup Explorer screen. The program shows search results on the **Files and folders** tab.


Acronis True Image Home
Home
Search results
Acronis
Tools & Utilities
Try & Decide
Help
Disks and partitions
Files and folders
My backups → Search result (86 items)
Name
Size
Date modified
Folder
Ver.
Backup name
Convert Acronis backup.lnk 2 KB 18-Aug-10 11:02:07 C:\ProgramData\Microsoft\Windows\Start ... 1 Partition C
Convert Acronis backup.lnk 2 KB 18-Aug-10 11:02:07 C:\ProgramData\Microsoft\Windows\Start ... 1 Partition_C(1)
Convert Acronis backup.lnk 2 KB 18-Aug-10 11:02:07 C:\ProgramData\Microsoft\Windows\Start ... 1 Partition_C
Convert Acronis backup.lnk 2 KB 18-Aug-10 11:02:07 C:\ProgramData\Microsoft\Windows\Start ... 5 My_system(2)
Convert Acronis backup.lnk 2 KB 18-Aug-10 11:02:07 C:\ProgramData\Microsoft\Windows\Start ... 1 My system
AcronisTibUrlHandler.exe 649 KB 17-Aug-10 18:39:24 C:\Program Files\Acronis\TrueImageHome\... 1 Partition C
AcronisTibUrlHandler.exe 649 KB 17-Aug-10 18:39:24 C:\Program Files\Acronis\TrueImageHome\... 1 Partition_C(1)
AcronisTibUrlHandler.exe 649 KB 17-Aug-10 18:39:24 C:\Program Files\Acronis\TrueImageHome\... 1 Partition_C
AcronisTibUrlHandler.exe 649 KB 17-Aug-10 18:39:24 C:\Program Files\Acronis\TrueImageHome\... 5 My_system(2)
AcronisTibUrlHandler.exe 649 KB 17-Aug-10 18:39:24 C:\Program Files\Acronis\TrueImageHome\... 1 My system
acronis_backup_cpl.dll 189 KB 17-Aug-10 18:38:08 C:\Program Files\Acronis\TrueImageHome\a... 1 Partition C
acronis_backup_cpl.dll 189 KB 17-Aug-10 18:38:08 C:\Program Files\Acronis\TrueImageHome\a... 1 Partition_C(1)
acronis_backup_cpl.dll 189 KB 17-Aug-10 18:38:08 C:\Program Files\Acronis\TrueImageHome\a... 1 Partition_C
Convert Acronis backup.lnk
Shortcut
Size: 2.2 KB
View versions
Selected to recover:
2 files (4.3 KB)
Recover
Today
12:17

By default Acronis True Image Home 2011 performs the search in all the sources where it can search information. That is, it searches files in all backups and their versions on all local storage devices.

*Acronis True Image Home 2011 cannot perform search on network shares, Acronis Online Storage, and devices that are recognized by Windows as **Devices with removable storage**.*

The **Files and folders** tab shows results of searches for files and folders in tib backups. Double-clicking on a filename opens the file. You can recover the file by right-clicking on its filename and choosing **Recover** in a shortcut menu. This shortcut menu also enables you to open the file or the parent folder that contains that file.

When searching files in backups you can type all or part of the filename and use the common Windows wildcard characters. For example, to find all batch files in the backups, type "*.bat". Typing my???.exe will allow you to find all .exe files with names consisting of five symbols and starting with

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"my". It should be noted that search is case-insensitive, i.e. "Backup" and "backup" is the same search string.

When a file is included in several backups and it has been modified, the search results will show the number of file versions in the appropriate column. Clicking on the number in this column opens the **View Versions** window where you can select the version you want to recover.

Please note that Acronis True Image Home 2011 does not search files in encrypted and password-protected tib backups nor in the password-protected Acronis Secure Zone. In addition, the program does not search files in zip backups created by Acronis True Image Home 2011.

6.7.2 Windows Search and Google Desktop integration

Acronis True Image Home 2011 has plug-ins for Google Desktop and Windows Search. If you use any of these search engines on your computer, you can install an appropriate plug-in for indexing your backups. Indexing will speed up searches in the backups. After indexing you will be able to search backup content by entering a filename into the Google Desktop or Windows Search deskbar query field without opening Acronis True Image Home 2011. The search results will be shown in a browser window. Using the search results you can:

- Select any file and open it for viewing and/or save that file back to anywhere in the file system (not in the backup) or where it was before
- See in which backup a given file is stored and recover that backup

In addition to indexing the files in backups by their names, the Google Desktop and Windows Search provide Acronis True Image Home 2011 with the ability to perform full-text indexing of many files in your backups. You will be able to use this feature and perform searches of the files' content.

Full-text indexing of files in backup archives is provided only for the file types recognizable by Google Desktop and Windows Search. They recognize text files, Microsoft Office files, all Microsoft Office Outlook and Microsoft Outlook Express items, and more.

The contents of password-protected backups or backups protected by a password and encryption will not be indexed, though Google Desktop and Windows Search provide search for the tib files of such backups. Furthermore, Google Desktop and Windows Search have no access to Acronis Secure Zone, so these search engines will be unable to search and index backups in the zone.

6.7.2.1 Using Google Desktop with Acronis True Image Home 2011

If you do not have Google Desktop, it can be downloaded for free from Google's Web site. Click http://desktop.google.com/ and follow the instructions for download and installation.

To enable using Google Desktop for searching files in Acronis backups:

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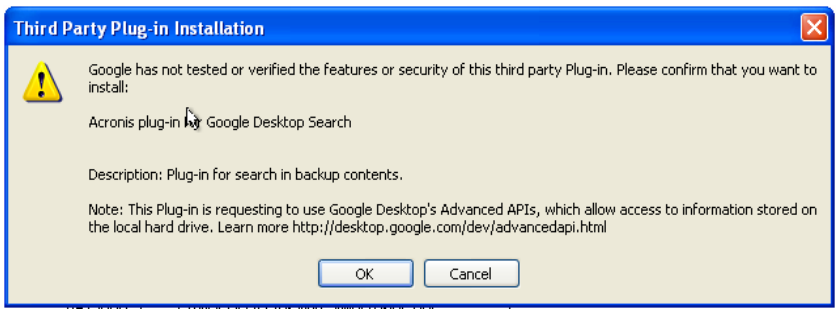
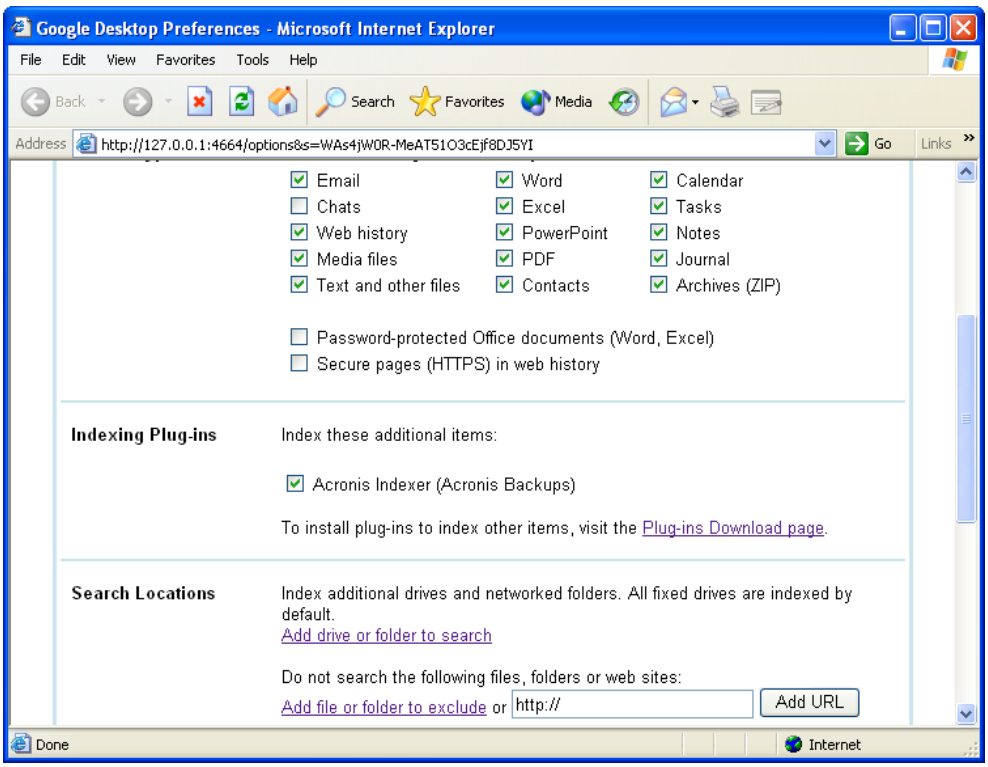
1. To install the plug-in, click the down arrow to the right of the Search field at the upper right corner of the main program window. Then choose **Search options** in the drop-down menu and select the **Google Desktop** check box. The following window appears:

Third Party Plug-in Installation
Google has not tested or verified the features or security of this third party Plug-in. Please confirm that you want to install:
Acronis Indexer
Description: Acronis Backups
OK
Cancel

2. Click **OK** to start plug-in installation. One more confirmation window may appear. In this case click **OK** to finish the installation.


Third Party Plug-in Installation
Google has not tested or verified the features or security of this third party Plug-in. Please confirm that you want to install:
Acronis plug-in for Google Desktop Search
Description: Plug-in for search in backup contents.
Note: This Plug-in is requesting to use Google Desktop's Advanced APIs, which allow access to information stored on the local hard drive. Learn more http://desktop.google.com/dev/advancedapi.html
OK
Cancel

3. Verify that the plug-in is installed. Right-click on the Google Desktop icon in your system tray and select **Options** in the shortcut menu. Google Desktop opens the **Preferences** window in your browser. Make sure that **Acronis Indexer (Acronis Backups)** is selected in the **Indexing Plug-ins** area.



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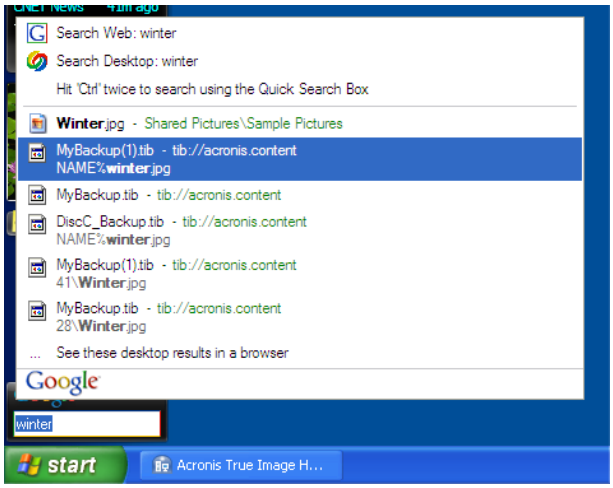
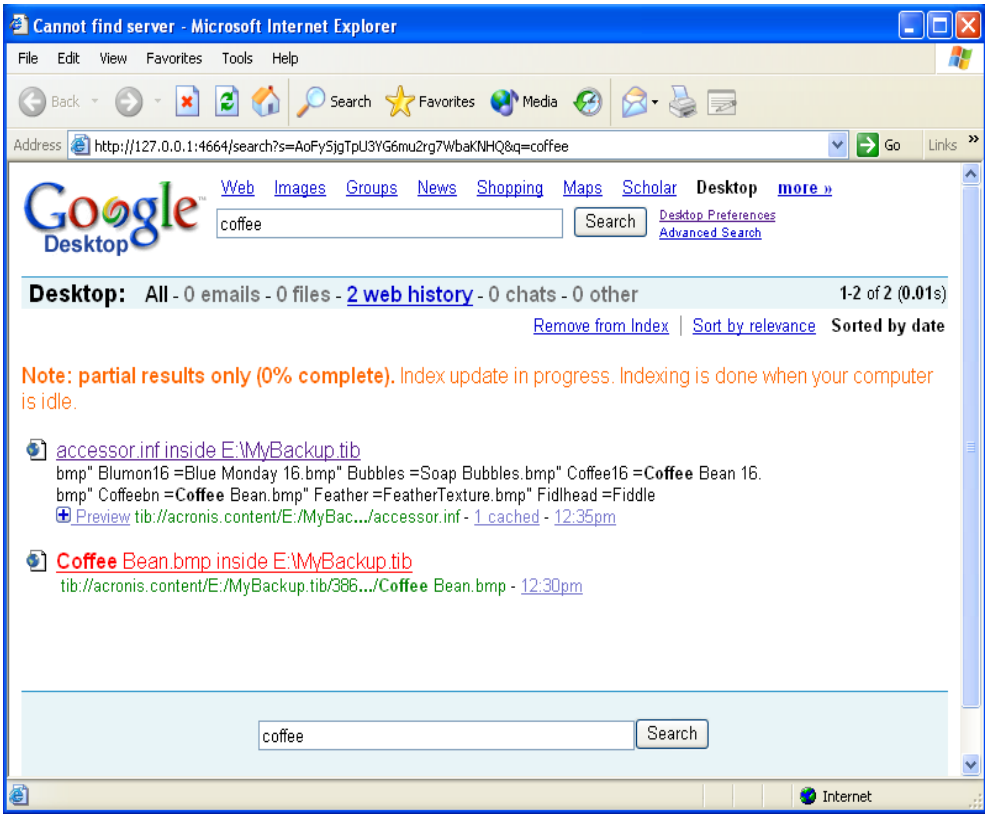
4. Right-click on the Google Desktop icon in your system tray once more and select **Indexing** → **Re-Index**. Click **Yes** in the confirmation window that appears. Google Desktop will add all the new content to the existing index.

Give Google Desktop some time for indexing all Acronis backups on your computer's hard disks and adding the indexing information to its index database. The required time depends on the number of Acronis backups and the number of files they contain.

After for example an hour, check whether Google Desktop has indexed the Acronis backups by entering in its query field the name of a file which you know for sure that you backed up. If Google Desktop has completed indexing, it will show you the backups where it has found the file.



If you want to see all the search results, click the "See all N results in a browser" and you will see something like the screen shot below.


Cannot find server - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address http://127.0.0.1:4664/search?s=AoFySjgTpU3YG6mu2rg7WbaKNHQ&q=coffee
Google Desktop
Web Images Groups News Shopping Maps Scholar Desktop more »
coffee
Search
Desktop Preferences
Advanced Search
Desktop: All - 0 emails - 0 files - 2 web history - 0 chats - 0 other
1-2 of 2 (0.01s)
Remove from Index | Sort by relevance Sorted by date
Note: partial results only (0% complete). Index update in progress. Indexing is done when your computer is idle.
accessor.inf inside E:\MyBackup.tib
bmp" Blumon16 =Blue Monday 16.bmp" Bubbles =Soap Bubbles.bmp" Coffee16 =Coffee Bean 16.
bmp" Coffeebn =Coffee Bean.bmp" Feather =FeatherTexture.bmp" Fidlhead =Fiddle
Preview tib://acronis.content/E:/MyBac.../accessor.inf - 1 cached - 12:35pm
Coffee Bean.bmp inside E:\MyBackup.tib
tib://acronis.content/E:/MyBackup.tib/386.../Coffee Bean.bmp - 12:30pm
coffee
Search
Internet

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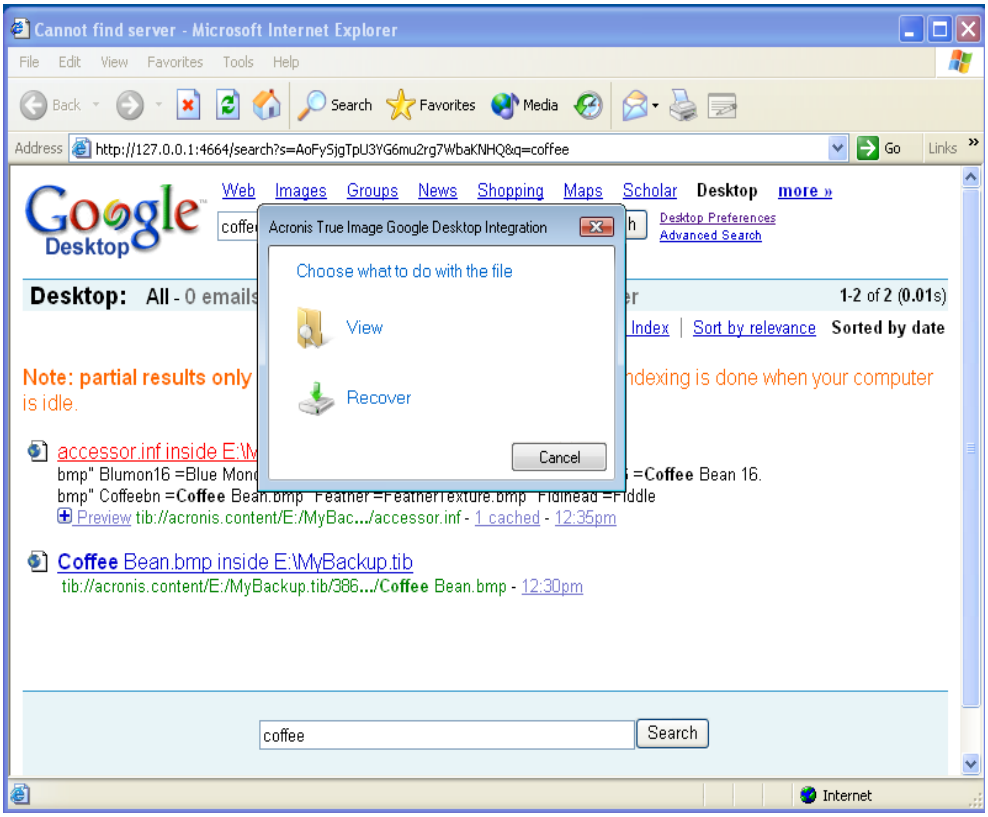
Clicking in the browser window on a line related to the desired file version opens a small dialog with just two options: **View** and **Recover**.



Choosing **View** starts the application associated with this file type and opens the file. Choosing **Recover** starts Acronis True Image Home 2011 and you can then recover the file to a desired location.

Google Desktop also provides for searching files in zip backups, created by Acronis True Image Home 2011, though you cannot open or recover files from zip backups by clicking on a line with a filename in the browser window. To recover files found in zip backups by Google Desktop, use Acronis True Image Home 2011's Recovery feature.

6.7.2.2 Using Windows Search with Acronis True Image Home 2011

If you use any edition of Windows Vista or Windows 7 that has built-in Desktop Search functionality or Windows Desktop Search 3.0 or later, you can enable indexing for tib files.

If you do not have Windows Search installed, but would like to use it, you can download Windows Search 4.0 for free from Microsoft's Web site. To download, click http://www.microsoft.com/windows/products/winfamily/desktopsearch/choose/windowssearch4.mspx?tab=Install%20It. Double-click on the downloaded file and follow the instructions for installation.

Windows Search does not support indexing of zip files content.

1. To register the plug-in, click the down arrow to the right of the Search field at the upper right corner of the main program window. Then choose **Search options** in the drop-down menu and select the **Windows Search** check box.
2. You can verify that the tib files indexing support is enabled. Right-click on the Windows Search icon in your system tray and select **Windows Desktop Search Options...** in the context menu. The

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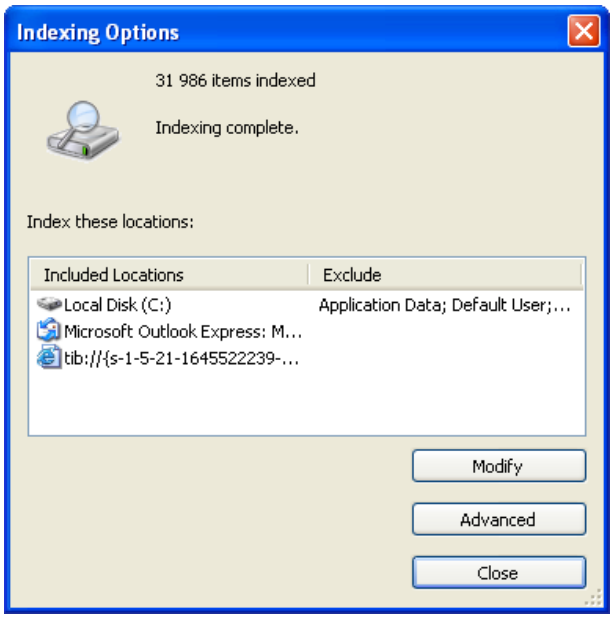
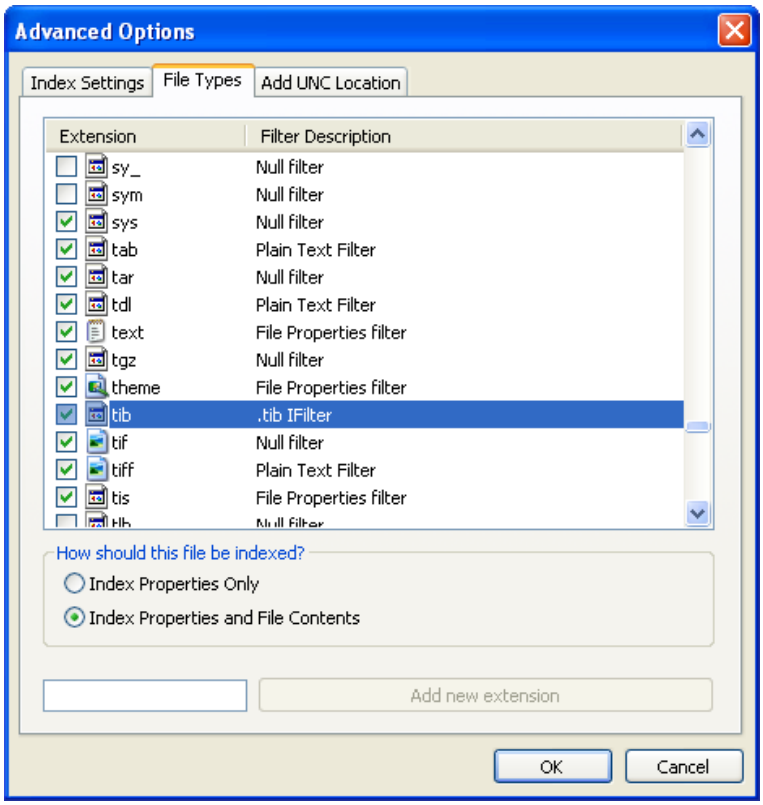
following window appears. Make sure that the "tib://..." item is present in the Included Locations list.

*To open the Indexing Options window in Windows Vista or Windows 7, open the Control Panel and then double-click the **Indexing Options** icon. The Windows Vista and Windows 7 indexing options have some differences in content and appearance, though most of the following information is applicable to those operating systems as well.*



3. Click **Advanced**, select the **File Types** tab and then make sure that the **tib** extension is selected and ".tib IFilter" is shown in the Filter Description field. Select **Index Properties and File Contents**.



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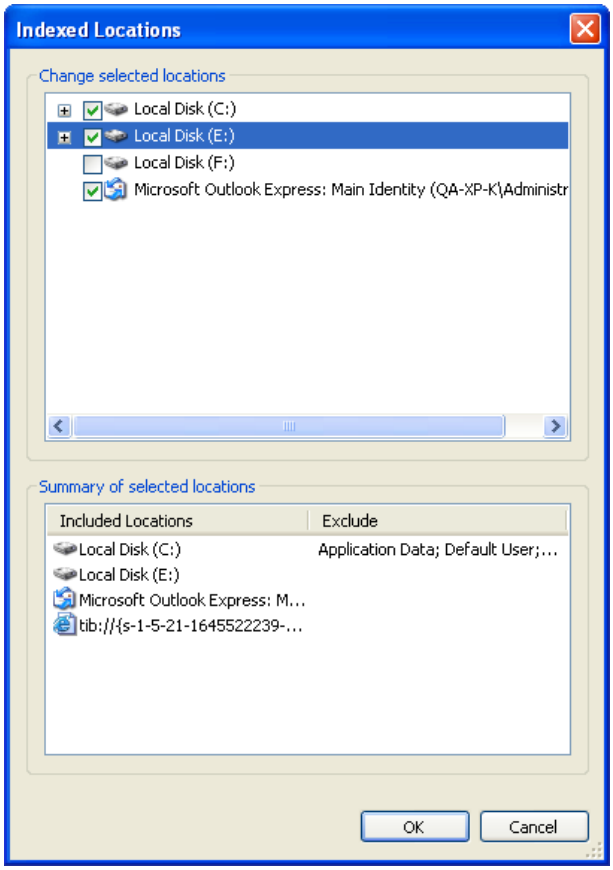
4. Click **OK** and while the **Indexing Options** window is open, check that the disks where you store your backups are shown in the "Included Locations" list. If the list does not contain those disks, the backups will not be indexed. To include the disks, click **Modify** and select them in the window that appears.



*If you store backups on a network share, Windows Search can index them too. You just have to add the share to the Indexed Locations list by typing the appropriate UNC path after selecting the **Add UNC Location** tab of **Advanced Options**.*

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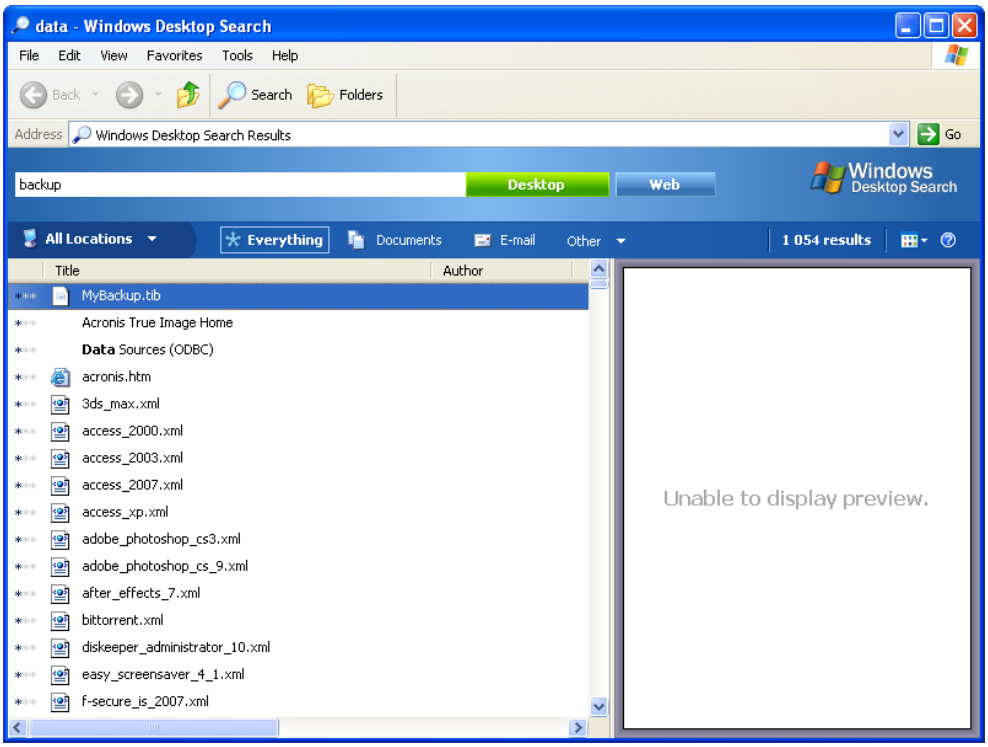
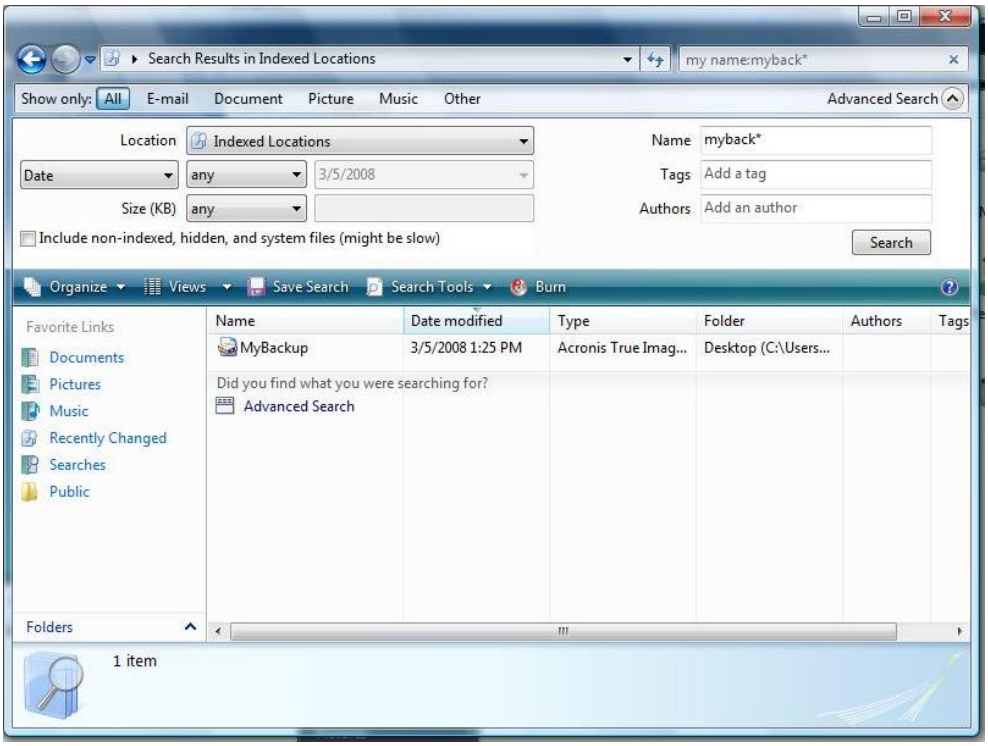
Give Windows Search some time for indexing Acronis backups on your computer's hard disks and adding the indexing information to its index database. The required time depends on the number of backups and the number of files they contain. After completing the indexing, the Windows Search will be able to search files in tib backups. The search engines in Windows Search and Windows Vista or Windows 7 have similar functionalities, though search results are presented somewhat differently:



Windows Search results



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6.8 Choosing columns for viewing in wizards

You can change the way the columns are represented in various wizards.

To sort items by a particular column, click the header (another click will switch the items to the opposite order).

To select columns to view, right-click in the right pane and select **Choose Columns** in the shortcut menu. Then flag the columns you want to display. You can also change the display order of columns using the **Move Up** and **Move Down** buttons.

You can change the width of a column by dragging its borders with the mouse.

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7 Tools & Utilities

Acronis Tools & Utilities include Protection tools, Conversion tools, Disk management utilities, Security and privacy utilities, Mounting tools and Backup settings transfer tools.

Protection tools:

- **Acronis Startup Recovery Manager**

  Allows you to start Acronis True Image Home 2011 without loading the operating system by pressing F11 at boot time before the operating system starts.

- **Rescue Media Builder**

  Allows you to create a bootable rescue media with Acronis products (or their specified components) installed on your computer.

- **Acronis Secure Zone**

  Allows you to store your backups in a special safe partition on your disk.

- **Boot Sequence Manager**

  Allows you to add Windows 7 system partition images to the booting list and then manage the list.

- **One-Click Backup**

  Allows you to protect your computer by immediately backing up your system partition and Master Boot Record (MBR).

Disk management utilities:

- **Clone disk**

  Use Clone disk wizard if you need to clone your hard disk drive by copying the partitions to another hard disk.

- **Add new disk**

  Add new disk wizard helps you to add a new hard disk drive to your computer. You will be able to prepare the new hard disk drive by creating and formatting new partitions on this hard disk.

System clean-up utilities:

- **Acronis DriveCleanser**

  Acronis DriveCleanser utility provides for secure destruction of data on your hard disk.

- **View current state of your disks**

  This link opens an integrated Acronis Disk Editor (in read-only mode) to show you the state of your cleaned up disks or partitions. For more information see Disk Editor (read-only mode) (p. 189).

- **File Shredder**

  With the File Shredder you can quickly select unnecessary files and folders and destroy them permanently.

- **System Clean-up**

  With the System Clean-up utility, you can clean up components (folders, files, registry sections, etc.), related to general system tasks. These Windows components retain evidence of user PC activity, so they too should be thoroughly wiped to maintain confidentiality.

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Mounting tools:

- **Mount image**

  With this tool you can explore a previously created image. You will be able to assign temporary drive letters to the partition images and easily access these images as ordinary, logical drives.

- **Unmount image**

  With this tool you can unmount the temporary logical drives you have created to explore an image.

Conversion tools:

- **Convert Acronis backup to Windows backup**

  Use the feature to convert a backup file format from tib to vhd. The vhd files can be used, for example, in Windows Vista and Windows 7 operating systems for mounting disk images without using Acronis True Image Home 2011.

- **Convert Windows backup to Acronis backup**

  Use the feature to convert a backup file format from vhd to tib. The latter is the native file format of Acronis backups.

Backup settings transfer tools:

- **Import backup settings**

  Allows you to get backup settings from another computer.

- **Export backup settings**

  Allows you to copy the settings of your backups and move them to another computer.

7.1 Acronis Startup Recovery Manager

7.1.1 How it works

The Acronis Startup Recovery Manager lets you start Acronis True Image Home 2011 without loading the operating system. With this feature, you can use Acronis True Image Home 2011 by itself to recover damaged partitions, even if the operating system won't boot. Unlike booting from Acronis removable media, you will not need a separate media or network connection to start Acronis True Image Home 2011.

7.1.2 How to use

To be able to use Acronis Startup Recovery Manager at boot time, prepare as follows:

1. Install Acronis True Image Home 2011.

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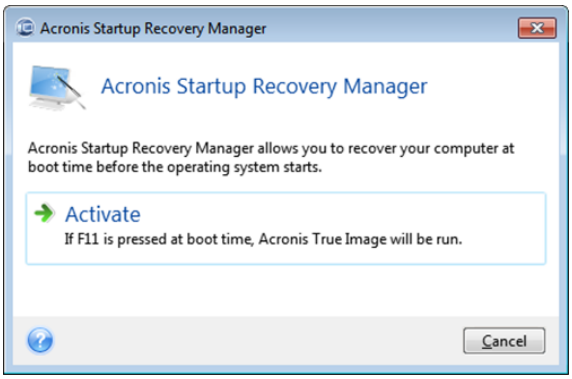
2. Activate Acronis Startup Recovery Manager.


Acronis Startup Recovery Manager
Acronis Startup Recovery Manager
Acronis Startup Recovery Manager allows you to recover your computer at boot time before the operating system starts.
Activate
If F11 is pressed at boot time, Acronis True Image will be run.
Cancel

When Acronis Startup Recovery Manager is activated, it overwrites the master boot record (MBR) with its own boot code. If you have any third-party boot managers installed, you will need to reactivate them after the Startup Recovery Manager has been activated. For Linux loaders (e.g. LiLo and GRUB), you might consider installing them to a Linux root (or boot) partition boot record instead of MBR before activating Acronis Startup Recovery Manager.

If a failure occurs, turn on the computer and press F11 when you see the "Press F11 for Acronis Startup Recovery Manager" message. This will start a standalone version of Acronis True Image Home 2011 that differs only slightly from the complete version.

7.2 Creating bootable rescue media

In this section

Acronis Media Builder.....153
Creating BartPE disc with Acronis True Image Home 2011 158
Creating WinPE-based rescue media.....160

7.2.1 Acronis Media Builder

You can run Acronis True Image Home 2011 from an emergency boot disk on a bare-metal system or a crashed computer that cannot boot. You can even back up disks on a non-Windows computer, copying all its data into the backup by imaging the disk one sector at a time. To do so, you will need bootable media that has a copy of the standalone Acronis True Image Home 2011 version installed on it.

If you purchased the boxed product, you already have a bootable CD, because the installation CD itself is bootable in addition to serving as the program installation disk.

If you purchased Acronis True Image Home 2011 on the Web or as a download from a retailer, you can create bootable media using the Bootable Media Builder. For this, you will need a blank CD-R/RW, a blank DVD+R/RW or any other media from which your computer can boot, such as a USB flash drive.

Acronis True Image Home 2011 also provides the ability to create an ISO image of a bootable disc on the hard disk.

If you have other Acronis products, such as Acronis Disk Director Suite installed on your computer, you can include standalone versions of these programs on the same bootable disk as well.

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If you have chosen not to install the Bootable Media Builder during Acronis True Image Home 2011 installation, you will not be able to use this feature.

When booting from the Rescue Media, you cannot perform backups to disks or partitions with Ext2/Ext3/Ext4, ReiserFS, and Linux SWAP file systems.

To create bootable media:

- Run the Acronis Media Builder wizard. To do so:
  - Click **Tools & Utilities** in the main menu and then click **Rescue Media Builder** on the **Tools & Utilities** screen

    or
  - Select **Programs** -> **Acronis** -> **Acronis True Image Home 2011** -> **Tools & Utilities** -> **Bootable Rescue Media Builder** from the **Start** menu.
- Click **Next** and follow the wizard's steps.

7.2.1.1 Rescue media contents selection

You can select which components of Acronis programs you want to place on the bootable media. If you have other Acronis products installed on your computer, such as Acronis Disk Director Suite, the bootable versions of these programs' components will be offered as well.

Acronis True Image Home 2011 offers the following components:

- **Acronis True Image Home 2011 (Full version)** - includes support of USB, PC Card (formerly PCMCIA) and SCSI interfaces along with the storage devices connected via them, and therefore is strongly recommended.
- **Acronis True Image Home 2011 (Safe version)** - does not include USB, PC card, and SCSI support. The safe version will be available for those who purchased the boxed version of Acronis True Image Home 2011 and installed the appropriate add-on.

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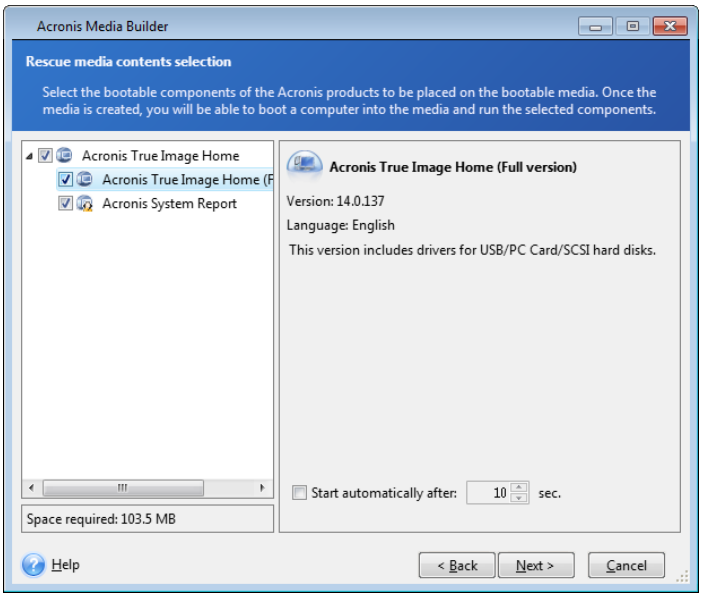
- **Acronis System Report** - the component allows you to generate a system report that is used for collecting information about your system in case of any program problem. Report generation will be available before you start Acronis True Image Home 2011 from the bootable media. The generated system report can be saved to a USB flash drive.


Acronis Media Builder
Rescue media contents selection
Select the bootable components of the Acronis products to be placed on the bootable media. Once the media is created, you will be able to boot a computer into the media and run the selected components.
Acronis True Image Home
Acronis True Image Home (F
Acronis System Report
Acronis True Image Home (Full version)
Version: 14.0.137
Language: English
This version includes drivers for USB/PC Card/SCSI hard disks.
Start automatically after:
10
sec.
Space required: 103.5 MB
Help
< Back
Next >
Cancel

To select a component:

- Select the check box of the program you want to include into the bootable media. The bottom field displays the space required for the selected components. If you have other Acronis products installed on your computer, you can also include standalone versions of these programs into the same bootable media.
- If automatic start of the program is necessary, select the **Starts automatically after** check box. The **Start automatically after** parameter specifies the timeout interval for the boot menu. If this parameter is not specified, the program will display the boot menu and wait for you to select whether to boot the OS or the Acronis component. If you set, for example, **10 sec** for Acronis rescue media, the standalone Acronis True Image Home 2011 will launch 10 seconds after the menu is displayed.
- Click **Next** to continue

7.2.1.2 Bootable media startup parameters

Here, you can set bootable media startup parameters in order to configure rescue media boot options for better compatibility with different hardware. Several options are available (nousb, nomouse, noapic, etc.). These parameters are provided for advanced users. If you encounter any hardware compatibility problems while testing boot from the rescue media, it may be best to contact Acronis Technical Support.

To add a startup parameter

- Enter a command into the **Parameters** field.
- Having specified the startup parameters, click **Next** to continue.

Additional parameters that can be applied prior to booting Linux kernel

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Description

The following parameters can be used to load Linux kernel in a special mode:

- **acpi=off**

Disables ACPI and may help with a particular hardware configuration.

- **noapic**

Disables APIC (Advanced Programmable Interrupt Controller) and may help with a particular hardware configuration.

- **nousb**

Disables loading of USB modules.

- **nousb2**

Disables USB 2.0 support. USB 1.1 devices still work with this option. This option allows using some USB drives in USB 1.1 mode, if they do not work in USB 2.0 mode.

- **quiet**

This parameter is enabled by default and the startup messages are not displayed. Deleting it will result in the startup messages being displayed as the Linux kernel is loaded and the command shell being offered prior to running the Acronis program.

- **nodma**

Disables DMA for all IDE disk drives. Prevents kernel from freezing on some hardware.

- **nofw**

Disables FireWire (IEEE1394) support.

- **nopcmcia**

Disables PCMCIA hardware detection.

- **nomouse**

Disables mouse support.

- **[module name]=off**

Disables the module (e.g. **sata_sis=off**).

- **pci=bios**

Forces to use PCI BIOS, and not to access the hardware device directly. For instance, this parameter may be used if the machine has a non-standard PCI host bridge.

- **pci=nobios**

Disallows use of PCI BIOS; only direct hardware access methods are allowed. For instance, this parameter may be used if you experience crashes upon boot-up, probably caused by the BIOS.

- **pci=biosirq**

Uses PCI BIOS calls to get the interrupt routing table. These calls are known to be buggy on several machines and they hang the machine when used, but on other computers it is the only way to get the interrupt routing table. Try this option, if the kernel is unable to allocate IRQs or discover secondary PCI buses on your motherboard.

- **vga=ask**

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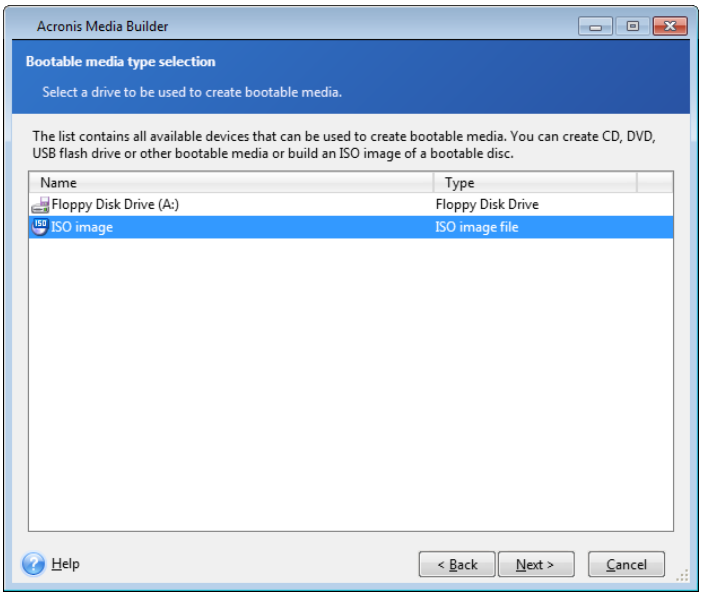
Gets the list of the video modes available for your video card and allows selecting a video mode most suitable for the video card and monitor. Try this option, if the automatically selected video mode is unsuitable for your hardware.

7.2.1.3 Bootable media selection

Select a destination for bootable media creation:

- **CD-R/RW** - if you are creating CD, insert a blank disc so that the program can determine its capacity.
- **ISO image** - having created an ISO disk image, you will be able to burn it onto any kind of recordable DVD, using DVD recording software. Creating a bootable DVD directly from Bootable Media Builder is impossible.
- any other media your PC can boot from, such as USB flash drives, etc.

If you use non-optical media, the media must have a FAT file system. This limitation is not applicable for an ISO image.


Acronis Media Builder
Bootable media type selection
Select a drive to be used to create bootable media.
The list contains all available devices that can be used to create bootable media. You can create CD, DVD, USB flash drive or other bootable media or build an ISO image of a bootable disc.
Name
Type
Floppy Disk Drive (A:)
Floppy Disk Drive
ISO image
ISO image file
Help
< Back
Next >
Cancel

7.2.1.4 Destination file selection

If you chose to create a bootable disk ISO image, specify the ISO file name and the folder where to place it:

- Select the destination folder from the folder tree
- Enter a name for the .iso file in the **File name** field
- Click **Next** to continue

7.2.1.5 Bootable media creation summary

This page displays operations to be performed.

Click **Proceed** to start the bootable media creation process.

Use the sidebar on the left to navigate through the wizard's steps for revision.

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To cancel operation and quit Acronis Media Builder, click **Cancel**.

After you create a boot disc, mark it and keep it in a safe place.

Please keep in mind that the backups created by the later program version may be incompatible with the previous program versions. Due to this reason, we strongly recommend that you create a new bootable media after each Acronis True Image Home 2011 upgrade. One more thing you should remember – when booting from the rescue media and using a standalone version of Acronis True Image Home 2011 you cannot recover files and folders encrypted with use of the encryption feature available in Windows XP and later operating systems. For more information see File-level security settings for backup (p. 62). On the other hand, backups encrypted using the Acronis True Image Home 2011 encryption feature can be recovered.

When booting from the rescue media you cannot recover image backups to GPT disks using a standalone version of Acronis True Image Home 2011.

7.2.2 Creating BartPE disc with Acronis True Image Home 2011

Bart PE (Bart Preinstalled Environment) is a bootable Windows CD/DVD created from the original Windows XP or Windows Server 2003 installation/setup CD. The current version of Acronis True Image Home 2011 does not have a plug-in for a preinstalled environment based on Windows Vista and Windows 7.

The main advantage of Bart PE is that it uses Windows drivers and has a Windows-like graphical user interface. It also provides for adding any storage drivers at startup in the same manner as when installing Windows on the hard drive (by pressing F6 and inserting a diskette with the drivers).

Applications are installed into Bart PE in the form of plug-ins and the Acronis True Image Home 2011 plug-in can be included into the Bart PE plug-in tab.

If you do not have the boxed version of Acronis True Image Home 2011, you will need to download a separate installation file from your Acronis account:

- Go to My Account section
- Log in;
- Register the serial number for your copy of Acronis True Image Home 2011 (if it is not registered yet);
- Click **Registered Products**;

Under the registered products click on **Bart PE & Safe Media** to download the plug-in. Install the plug-in as follows:

1. Double-click on the downloaded file to start installation.
2. If you only want to install the Bart PE plug-in, choose Custom installation and unselect the Safe Media add-on. Otherwise choose Typical.
3. Having finished the installation, you can proceed with creating a Bart PE CD/DVD with Acronis True Image Home 2011 plug-in.

The below description is based on PE builder version 3.1.10a.

To create a BartPE CD with the Acronis True Image Home 2011 plug-in follow the instructions below:

- Download the PE builder and install it;

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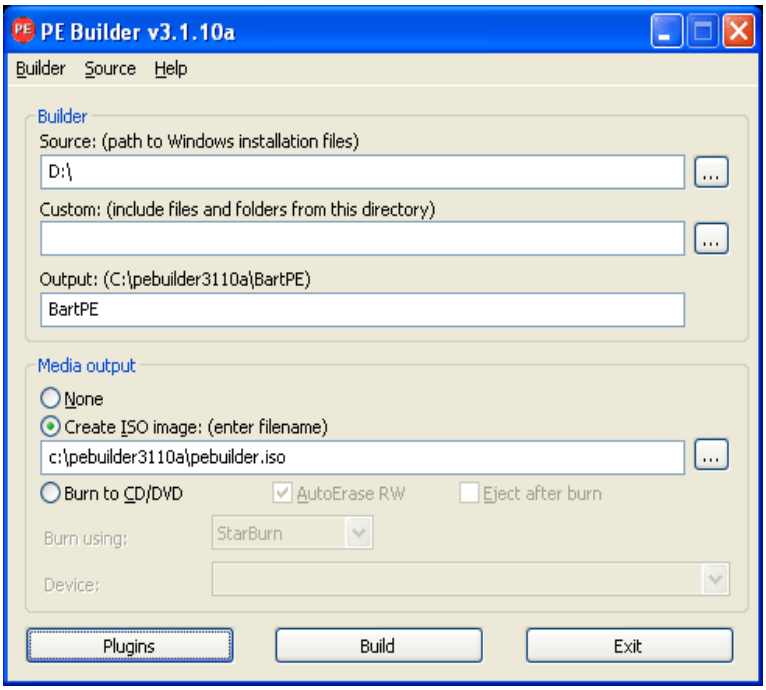
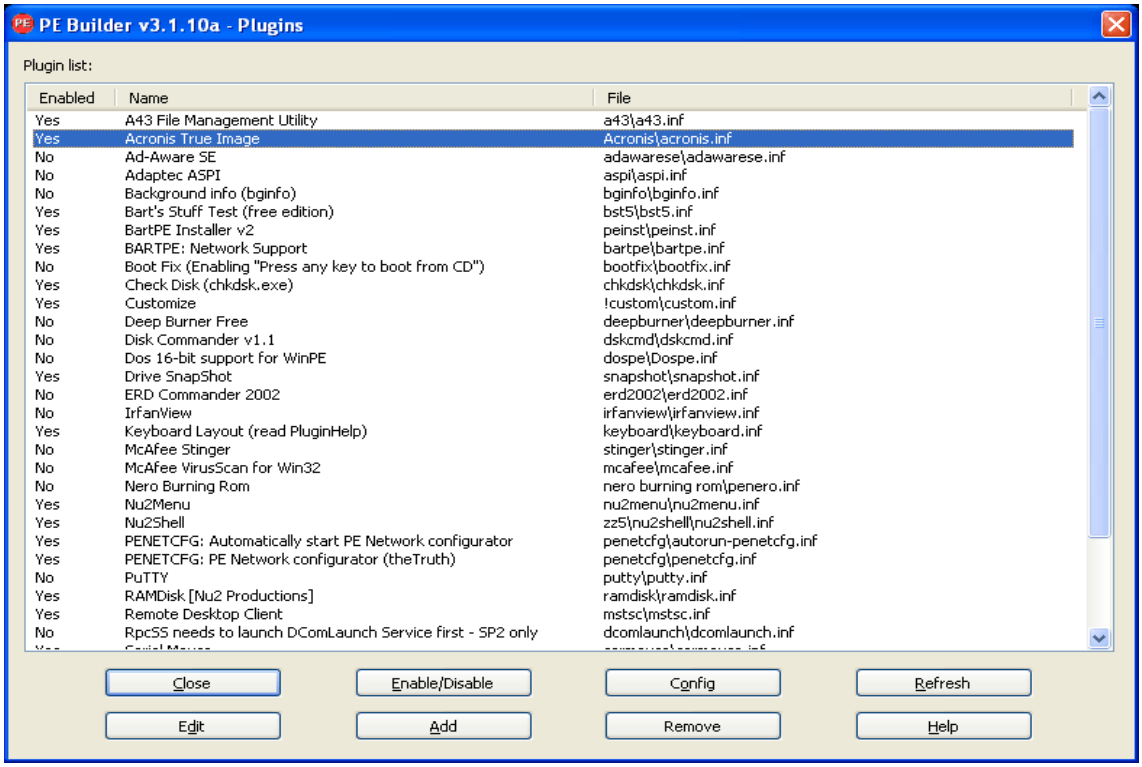
Go to the Acronis True Image Home 2011 installation folder. (The default folder is C:\Program Files\Acronis or C:\Program Files\Acronis\Media Add-ons). Rename the BartPE folder to Acronis. Copy this folder into the Plugin folder in the BartPE builder installation directory. (The default directory is C:\pebuilder3110a or similar);

Run the PE builder, put in the necessary paths (the online help is available at PE builder help), and click the Plugins button:



Make sure you have the Acronis True Image Home 2011 plug-in enabled on the Plugins screen:


PE Builder v3.1.10a - Plugins
Plugin list:
Enabled Name File
Yes A43 File Management Utility a43\a43.inf
Yes Acronis True Image Acronis\acronis.inf
No Ad-Aware SE adawarese\adawarese.inf
No Adaptec ASPI aspi\aspi.inf
No Background info (bginfo) bginfo\bginfo.inf
Yes Bart's Stuff Test (free edition) bst5\bst5.inf
Yes BartPE Installer v2 peinst\peinst.inf
Yes BARTPE: Network Support bartpe\bartpe.inf
No Boot Fix (Enabling "Press any key to boot from CD") bootfix\bootfix.inf
Yes Check Disk (chkdsk.exe) chkdsk\chkdsk.inf
Yes Customize !custom\custom.inf
No Deep Burner Free deepburner\deepburner.inf
No Disk Commander v1.1 dskcmd\dskcmd.inf
No Dos 16-bit support for WinPE dospe\Dospe.inf
Yes Drive SnapShot snapshot\snapshot.inf
No ERD Commander 2002 erd2002\erd2002.inf
No IrfanView irfanview\irfanview.inf
Yes Keyboard Layout (read PluginHelp) keyboard\keyboard.inf
No McAfee Stinger stinger\stinger.inf
No McAfee VirusScan for Win32 mcafee\mcafee.inf
No Nero Burning Rom nero burning rom\penero.inf
Yes Nu2Menu nu2menu\nu2menu.inf
Yes Nu2Shell zz5\nu2shell\nu2shell.inf
Yes PENETCFG: Automatically start PE Network configurator penetcfg\autorun-penetcfg.inf
Yes PENETCFG: PE Network configurator (theTruth) penetcfg\penetcfg.inf
No PuTTY putty\putty.inf
Yes RAMDisk [Nu2 Productions] ramdisk\ramdisk.inf
Yes Remote Desktop Client mstsc\mstsc.inf
No RpcSS needs to launch DComLaunch Service first - SP2 only dcomlaunch\dcomlaunch.inf
Close
Enable/Disable
Config
Refresh
Edit
Add
Remove
Help

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Close the Plugins window and click the Build button to start the building process. If you want the image to be burned to CD, select the Burn to CD option and choose the necessary burner in the Device menu;

After the image is created, burn it to CD or DVD. (If you did not check the Burn to CD option at the previous step.)

After booting from the CD/DVD, you can find the Acronis True Image Home 2011 plug-in in Go/System/Storage.

Adding drivers

BartPE supports adding two types of drivers: storage drivers and network drivers. For instructions on how to add drivers refer to PE builder driver help.

There is also an option to add storage drivers (for RAID or SCSI devices) during BartPE boot-up. (You need to press F6 and point to the diskette with the drivers). Common storage drivers are available at PE builder drivers.

When you boot from the newly created BartPE media, Acronis True Image Home 2011 can be found here:

Go → System → Storage → Acronis True Image Home 2011.

7.2.3 Creating WinPE-based rescue media

To create a WinPE-based rescue media, you need to purchase and install Acronis True Image Home 2011 Plus Pack.

Acronis Plug-in for WinPE can be added to WinPE distributions based on any of the following kernels:

- Windows Vista (PE 2.0) (also suitable for Windows XP SP2 with KB926044 or later)
- Windows Vista SP1 (PE 2.1) (also suitable for Windows XP SP2 with KB926044 or later)
- Windows 7 (PE 3.0)

To be able to create or modify PE 2.x and 3.0 images, you must have Windows Automated Installation Kit (AIK) installed.

If you do not have Windows AIK installed on your PC, prepare as follows:

1. Download and install Windows Automated Installation Kit.

   AIK for Windows Vista and Windows XP with Service Pack 2 or later (PE 2.0):

   http://www.microsoft.com/Downloads/details.aspx?familyid=C7D4BC6D-15F3-4284-9123-679830D629F2&displaylang=en

   AIK for Windows Vista SP1 (PE 2.1):

   http://www.microsoft.com/downloads/details.aspx?FamilyID=94bb6e34-d890-4932-81a5-5b50c657de08&DisplayLang=en

   AIK for Windows 7 (PE 3.0):

   http://www.microsoft.com/DOWNLOADS/details.aspx?familyid=696DD665-9F76-4177-A811-39C26D3B3B34&displaylang=en
2. [optional] Burn the Windows AIK to DVD or copy to a flash drive.
3. Install the Microsoft .NET Framework v.2.0 from this kit (NETFXx86 or NETFXx64, depending on your hardware).

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4. Install Microsoft Core XML (MSXML) 6.0 Parser from this kit.
5. Install Windows AIK from this kit.

It is recommended that you familiarize yourself with the help documentation supplied with Windows AIK. A good starting point is the "Create an image" section of "Getting Started for IT Professionals" white paper. To access the document, select **Microsoft Windows AIK** → **Documentation** → **Getting Started for IT Professionals** from the **Start** menu.

For more information on customizing Windows PE, see the Windows Preinstallation Environment User's Guide (Winpe.chm).

Integrating Acronis True Image Home 2011 with WinPE 2.x or 3.0 ISO

Acronis WinPE ISO Builder provides three methods of integrating Acronis True Image Home 2011 with WinPE 2.x and WinPE 3.0:

- Creating the PE 2 or PE 3 ISO with the plug-in from scratch.
- Adding the Acronis Plug-in to the existing PE 2 or PE 3 ISO. This comes in handy when you have to add the plug-in to the previously configured PE 2 or PE 3 ISO that is already in use.
- Adding the Acronis Plug-in to a WIM file for any future purpose (manual ISO building, adding other tools to the image and so on).

To be able to perform any of the above operations, Acronis True Image Home 2011 Plus Pack and Windows Automated Installation Kit (WAIK) must be installed on your PC. If you have not installed WAIK, install it as described earlier in this section.

Acronis WinPE ISO Builder supports only x86 WinPE 2.x and WinPE 3.0. This WnPE distribution can also work on x64 hardware.

A PE image based on Win PE 2.x or 3.0 requires at least 256MB RAM to work. The recommended memory size for PE 2.x or 3.0 is 512MB.

7.2.3.1 Creating a new Win PE 2.x or PE 3.0 ISO with the Acronis Plug-in

You must have Acronis True Image Home 2011 Plus Pack installed on your PC.

Creating a new Win PE 2.x or PE 3.0 ISO with the Acronis Plug-in begins from creating a Windows PE build directory:

1. Select **Microsoft Windows AIK** → **Windows PE Tools Command Prompt** from the **Start** menu.

   Users of Windows 7 should select **Microsoft Windows AIK** → **Deployment Tools Command Prompt** from the **Start** menu.
2. Run the **copype.cmd** script to create a folder with Windows PE files. For example, from a command prompt, type:

   ```
   copype x86 c:\winpe_x86
   ```

   When the operation finishes, create an ISO:
3. Select **Acronis** → **Plus Pack for Acronis True Image Home 2011** → **Acronis WinPE ISO Builder** from the **Start** menu.

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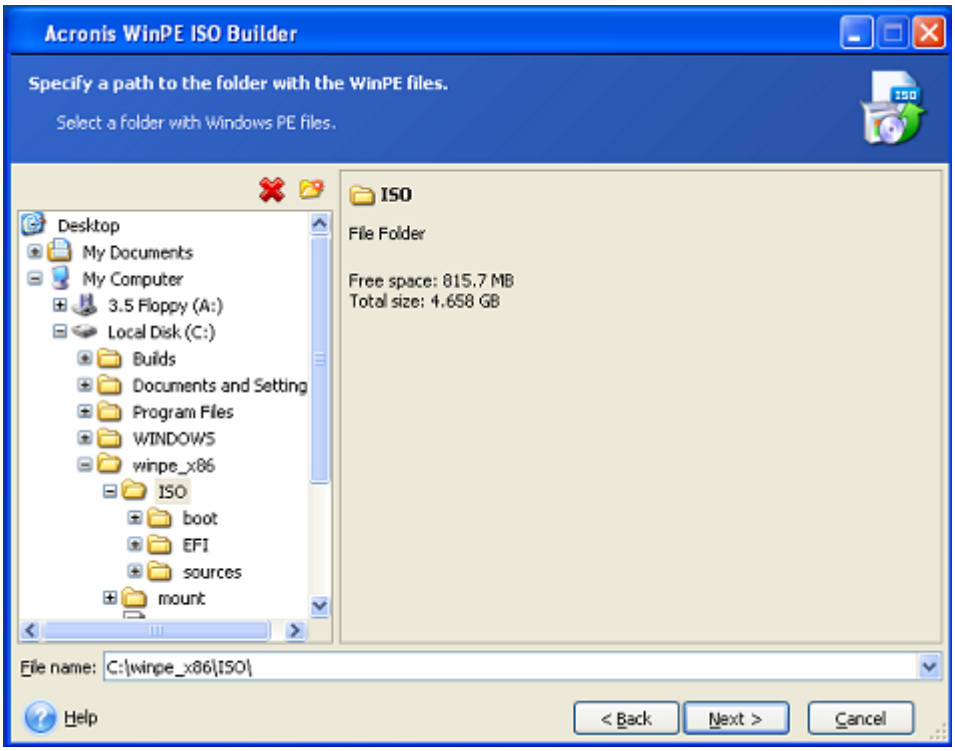
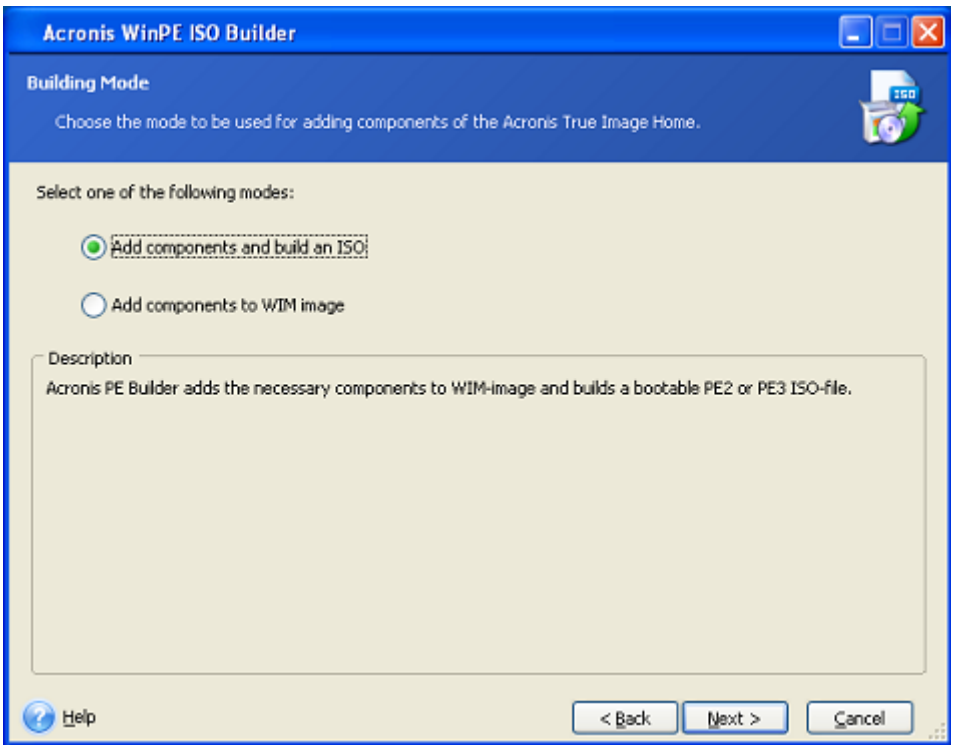
4. Specify the path to the folder WinPE\ISO, e.g. c:\winpe_x86\ISO.



5. On the next screen choose the **Add components and build an ISO** option and click **Next**.


Acronis WinPE ISO Builder
Building Mode
Choose the mode to be used for adding components of the Acronis True Image Home.
Select one of the following modes:
Add components and build an ISO
Add components to WIM image
Description
Acronis PE Builder adds the necessary components to WIM-image and builds a bootable PE2 or PE3 ISO-file.
Help
< Back
Next >
Cancel

6. Specify the full path to the resulting image file including the filename or leave the default path and filename (AcronisMedia.iso).

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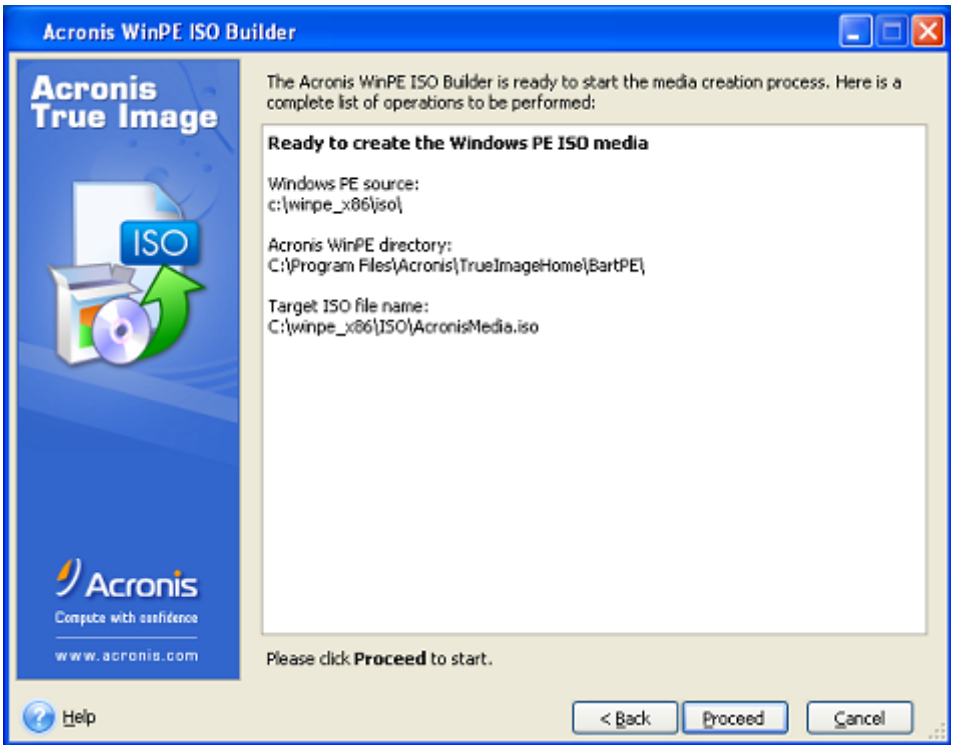
7. Check your settings in the summary screen and click **Proceed**.



8. Burn the .ISO to a CD using a third-party tool (for example, Nero) and you will have a bootable Windows PE disc with Acronis True Image Home 2011.

Once a machine boots into WinPE, Acronis True Image Home 2011 starts automatically. Be aware that startup may take a considerable amount of time.

7.2.3.2 Adding the Acronis Plug-in to the existing WinPE 2.x or 3.0 ISO

To be able to add the Acronis Plug-in, you must first install Acronis True Image Home 2011 Plus Pack on your PC.

1. Unpack all files of your Win PE 2 or 3 ISO to a separate folder on the hard disk.
2. Select **Acronis** → **Plus Pack for Acronis True Image Home 2011** → **Acronis WinPE ISO Builder** from the **Start** menu.
3. Specify the path to the folder with the WinPE files.
4. Specify the full path to the resulting ISO file including the filename or leave the default path and filename (AcronisMedia.iso).
5. Check your settings in the summary screen and click **Proceed**.
6. Burn the .ISO to a CD using a third-party tool (for example, Nero) and you will have a bootable Windows PE disc with Acronis True Image Home 2011.

Once a machine boots into WinPE, Acronis True Image Home 2011 starts automatically. Be aware that startup may take a considerable amount of time.

7.2.3.3 Adding the Acronis Plug-in to WinPE 2.x or 3.0 WIM

1. Select **Acronis** → **Plus Pack for Acronis True Image Home 2011** → **Acronis WinPE ISO Builder** from the **Start** menu.

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2. Specify the path to the source WINPE.WIM file. The standard path to this file for x86 hardware is \Program Files\Windows AIK\Tools\PETools\X86\winpe.wim.
3. Specify the full path to the resulting WIM file, including the filename or leave the default path and filename (AcronisMedia.wim).
4. Check your settings in the summary screen and click **Proceed**.

To create a PE image (ISO file) from the resulting WIM file:

1. Select **Microsoft Windows AIK** → **Windows PE Tools Command Prompt** from the **Start** menu.
2. Users of Windows 7 should select **Microsoft Windows AIK** → **Deployment Tools Command Prompt** from the **Start** menu.
3. Run the **copype.cmd** script to create a folder with Windows PE files. For example, from a command prompt, type:

```
copype x86 c:\winpe_x86
```

4. Replace the default boot.wim file in your Windows PE folder with the newly created WIM file. For the above WIM file creation example with the default path to the newly created WIM file, type:

```
copy c:\Program Files\Windows AIK\Tools\PETools\X86\AcronisMedia.wim
c:\winpe_x86\ISO\sources\boot.wim
```

5. Use the **Oscdimg** tool. To create an ISO file, type:

```
oscdimg -n –bc:\winpe_x86\etfsboot.com c:\winpe_x86\ISO
c:\winpe_x86\winpe_x86.iso
```

7.3 Working with Acronis Secure Zone®

The Acronis Secure Zone® is a special partition for storing backups on the same computer that created the backup. The current Acronis True Image Home 2011 creates the zone as an NTFS partition.

When you click **Acronis Secure Zone** on the **Tools & Utilities** screen, the program searches for the zone on all local drives. If the zone is found, the wizard will offer to manage it (resize, change the password) or delete it. If there is no zone, you will be prompted to create it.

The Acronis Secure Zone is not available as a location for backups in the recovery environment when you start Acronis True Image Home 2011 from bootable rescue media, through Acronis Startup Recovery Manager or Bart PE.

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Size of Acronis Secure Zone....167
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7.3.1 Acronis Secure Zone

The Acronis Secure Zone is a secure partition that lets you keep backups on a managed machine disk space. This lets you recover a disk where the disk backup resides.

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In the Acronis True Image Home 2011, the zone is listed along with all locations available for storing backups.

Certain Windows applications, such as Acronis disk management tools, can access the Acronis Secure Zone.

When you create an Acronis Secure Zone, an icon appears under **My Computer** in the **Other** section. Double-clicking on the Acronis Secure Zone icon opens the Secure Zone and you can view all the backups it contains. You can also open the Secure Zone by right-clicking on its icon and choosing **Open** in the shortcut menu.

Double-clicking on a backup icon shows all backup versions (full, incremental, differential) contained in that backup. Right-clicking on a specific backup version opens the shortcut menu allowing you to choose a desired operation. For example, you can choose mount (for image backups), recover, validate, update, remove the backup, and view the backup's details. If Acronis Secure Zone is password-protected, any operation, except viewing backup details, will require entering the password. Double-clicking on a backup will start the default operation (**Mount** for image backups and **Recovery** for data backups).

The shortcut menu that appears after right-clicking on the Acronis Secure Zone icon has two more items – **Create Shortcut** (for placing it on the Desktop) and **Explore** (for exploring the zone contents).

Choosing **Explore** opens Windows Explorer with the Acronis Secure Zone selected on the directory tree. This lets you explore the zone contents.

The Acronis Secure Zone is available as a location to store backup files as long as it has free space. If there is not enough space, older backups will be deleted to create free space.

Acronis True Image Home 2011 uses the following approach to clean up Acronis Secure Zone:

- If you are in the process of creating a backup and there is not enough free space in the zone to create it, the program will display a dialog which warns you that the Acronis Secure Zone is full. You can click **Cancel** to cancel the backup operation. In that case, you may want to increase the size of the Acronis Secure Zone and then run the backup operation again. If you want to free up some space in the zone, click **OK** and the oldest full backup version of the type being created will be deleted with all subsequent incremental/differential backup versions. The backup operation will then recommence.
- If deleting the oldest backup does not free up enough space, you will get the same warning message again. You may delete the next oldest backup (if any) and repeat this until all the previous backups are deleted.
- If after deleting all the previous backups there is still not enough space for completing the backup, you will get an error message and the backup will be canceled.

The program distinguishes only two types of backups in the zone: disk image backups and file-level backups. File and E-mail backups are considered as file-level type backups. For example, if you have an e-mail backup in the zone and there is not enough space for backing up a folder, the program will delete the e-mail backup to free up space for the folder backup.

You can use the Acronis Secure Zone as the storage for virtual system changes in the Try mode. The Try&Decide data will be automatically cleaned up after you stop a Try&Decide session.

If the Acronis Secure Zone is used as the Nonstop Backup data destination, the program does not clean up such data automatically. You can clean up Nonstop Backup data manually. For more information see Acronis Nonstop Backup data storage (p. 48).

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You can back up data automatically on a schedule (see Scheduling (p. 139)). In order to not worry about zone overflow during a scheduled backup, it is recommended to select the **When not enough space in ASZ, delete the oldest backup** box in the scheduled backup options (Error handling).

7.3.2 Acronis Secure Zone location

If you are creating the Acronis Secure Zone, select a disk and its partition whose space will be used to create Acronis Secure Zone. You can also select free or unallocated space of other partitions, if these partitions are located on the selected disk. Note that the Acronis Secure Zone can be located on basic disks only; you cannot create it on dynamic disks and volumes, as well as GPT disks.

To specify a location for the Acronis Secure Zone:

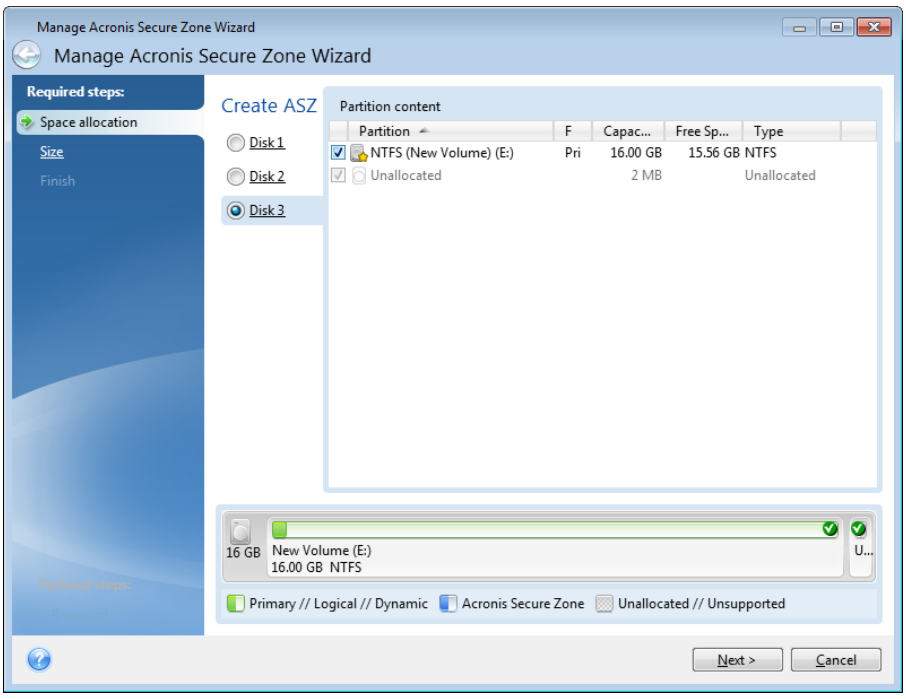
- Click on a hard disk drive to create the Acronis Secure Zone on.
- On the selected hard disk drive, select one or more partitions from which unallocated and/or free space will be taken. The chosen partitions will be resized if necessary to give space to the Acronis Secure Zone.
- Having selected disks and partitions, click **Next** to proceed to the Size of Acronis Secure Zone (p. 167) step.

To increase/decrease the size of the Acronis Secure Zone:

- Select the partitions from which space will be used to increase the size of the Acronis Secure Zone, or that will receive free space after the size of the Acronis Secure Zone is reduced. You can also select partitions with unallocated space.
- Click **Next** to proceed to the Size of Acronis Secure Zone (p. 167) step.

7.3.3 Selecting partitions

Select the partitions from which space will be used to create Acronis Secure Zone. You can also select an unallocated space to create the zone.



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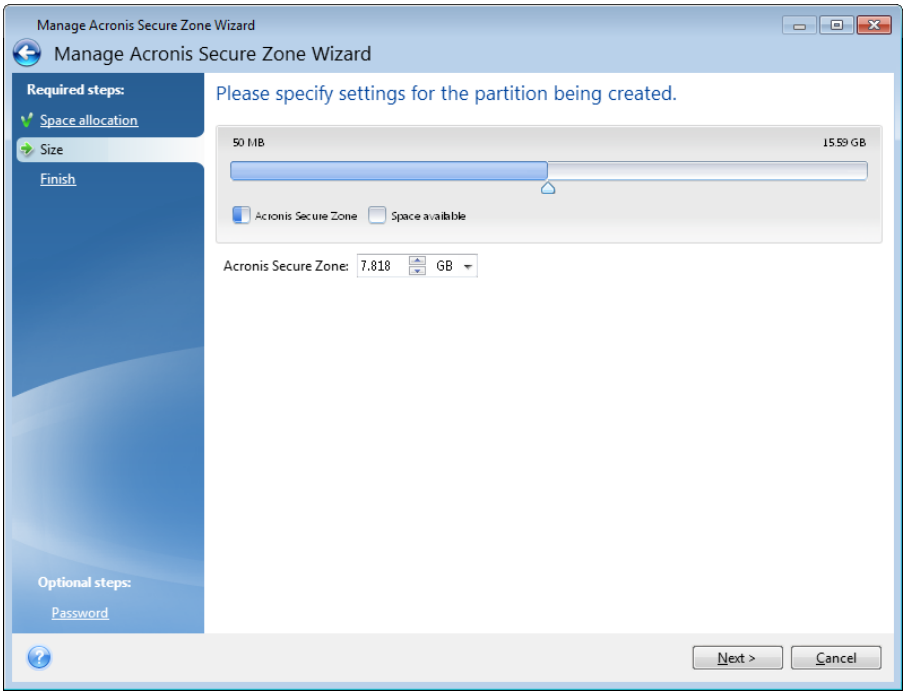
To select a partition:

- Select the appropriate partition check box and click **Next**.

7.3.4 Size of Acronis Secure Zone

You can specify the size of the Acronis Secure Zone.



The minimum size is about 50 MB, depending on the geometry of the hard disk. The maximum size is equal to the disk's unallocated space plus the total free space on all partitions selected at the previous step.

When creating/enlarging the Acronis Secure Zone, the program will first use the unallocated space. If the unallocated space is not enough to achieve the desired size, the selected partitions will be decreased in size. Resizing of partitions may require the computer to be rebooted.

When reducing the size of the Acronis Secure Zone, if there is any unallocated space on the hard disk, it will be allocated to the selected partitions along with the space freed up from the Acronis Secure Zone. Thus, no unallocated space will remain on the disk.

Please, keep in mind that reducing a system partition to the minimum size may prevent your operating system from booting-up.

To specify the size of the Acronis Secure Zone:

- Drag the slider to the appropriate position or type an exact value into the **Acronis Secure Zone:** size field.

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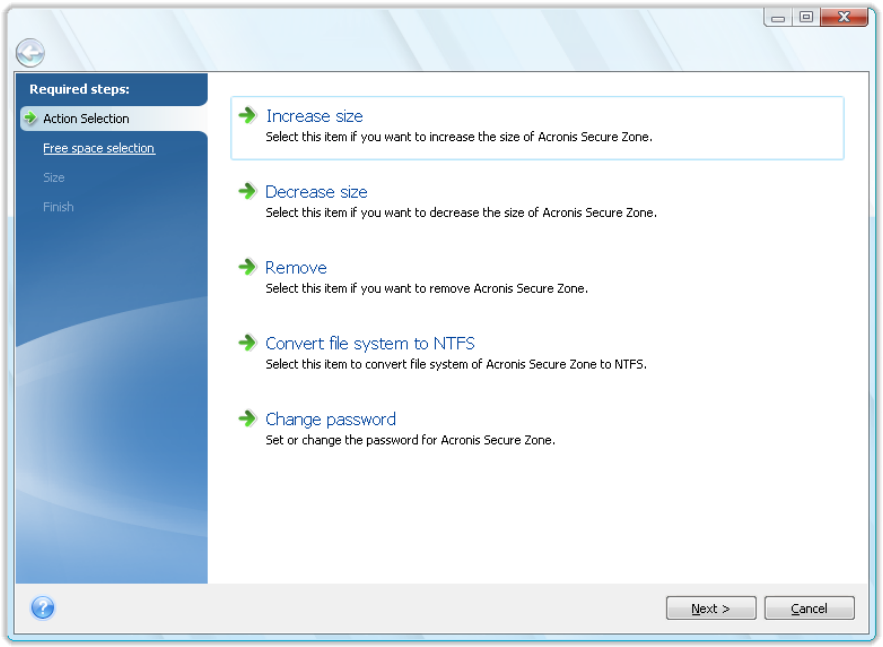
7.3.5 Managing Acronis Secure Zone

You can manage the Acronis Secure Zone.


Required steps:
Action Selection
Free space selection
Size
Finish
Increase size
Select this item if you want to increase the size of Acronis Secure Zone.
Decrease size
Select this item if you want to decrease the size of Acronis Secure Zone.
Remove
Select this item if you want to remove Acronis Secure Zone.
Convert file system to NTFS
Select this item to convert file system of Acronis Secure Zone to NTFS.
Change password
Set or change the password for Acronis Secure Zone.
Next >
Cancel

- Increase size (p. 168) - choose this item if you want to increase the size of the Acronis Secure Zone.
- Decrease size (p. 168) - choose this item if you want to decrease the size of the Acronis Secure Zone.
- Remove (p. 170) - choose this item if you want to remove the Acronis Secure Zone from your hard disk.
- Convert file system to NTFS (p. 170) - choose this item if you want to convert the zone file system from FAT32 to NTFS. This item appears only if you have the Acronis Secure Zone created by a previous Acronis True Image Home 2011 version.
- Change password (p. 169) - choose this item if you want to change the password for accessing the Acronis Secure Zone.

7.3.5.1 Increase size

Select the partitions from which space will be used to increase the size of Acronis Secure Zone. An unallocated space also might be selected.

To select a partition:

- Select the appropriate partition's check box then, click **Next**.

7.3.5.2 Decrease size

Select a partition that will receive free space after Acronis Secure Zone is reduced in size. You can also select an unallocated space to reduce the size of the secure zone.

To select a partition:

- Select the appropriate partition's check box then, click **Next**.

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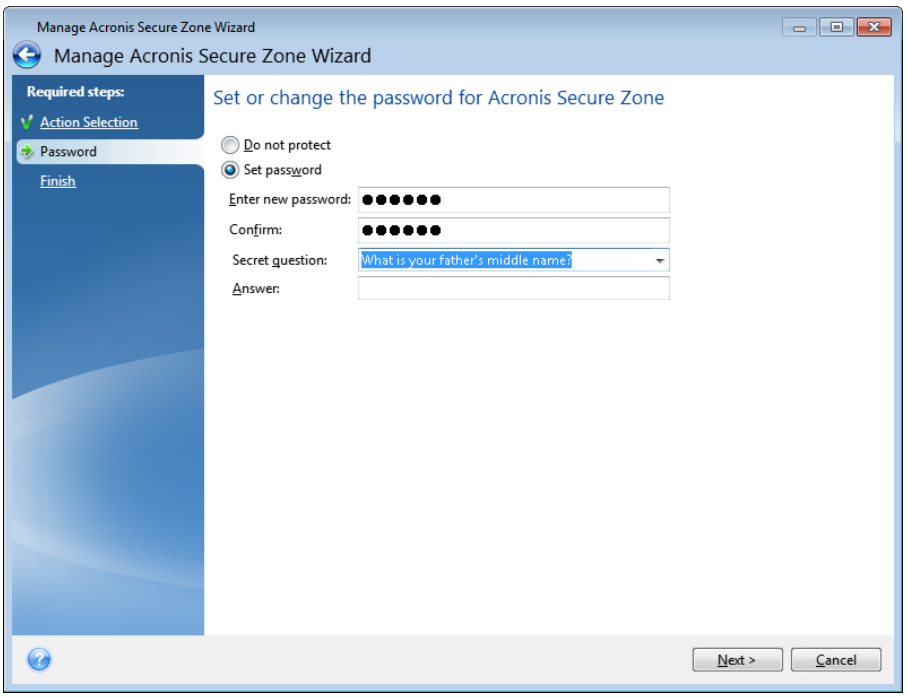
7.3.5.3 Acronis Secure Zone protection

Here, you can set up password protection for the Acronis Secure Zone in order to prevent it from unauthorized access.

The program will ask for the password at any operation relating to the Acronis Secure Zone such as data backup and recovery, mounting images or validating backups in the Acronis Secure Zone, resizing and deleting the Acronis Secure Zone.

Password settings

- **Do not protect** - choose this option, if you do not want to use password protection for the secure zone.
- **Set password** - choose this option, if you need to protect the Acronis Secure Zone with a password.
  - Type the password in the **Password** field.
  - Retype the previously entered password in the **Confirm** field.
  - You can also select a secret question that will be asked in case you forget the password. Select a secret question from the list and enter an answer to it.
- Click **Next** to continue.



Acronis True Image Home 2011 repair or update will not affect the password. However, if the program is removed and then installed again while keeping the Acronis Secure Zone on the disk, the password to the Acronis Secure Zone will be reset.

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7.3.5.4 Convert file system to NTFS

When you upgrade from a previous version of Acronis True Image Home 2011 and the Acronis Secure Zone exists in your system, you can convert the zone file system from FAT32 to NTFS. Such a conversion will not result in the loss of backups you already have in the Acronis Secure Zone. It is recommended to convert the zone file system if you plan to use the Acronis Secure Zone as the Acronis Nonstop Backup data storage.

If you convert the file system of Acronis Secure Zone to NTFS, this item will not appear at the later starts of the wizard.

7.3.5.5 Removing Acronis Secure Zone

Select the partitions to which you want to add the space freed up from Acronis Secure Zone. If you select several partitions, the space will be distributed proportionally to each partition's size.

To select a partition:

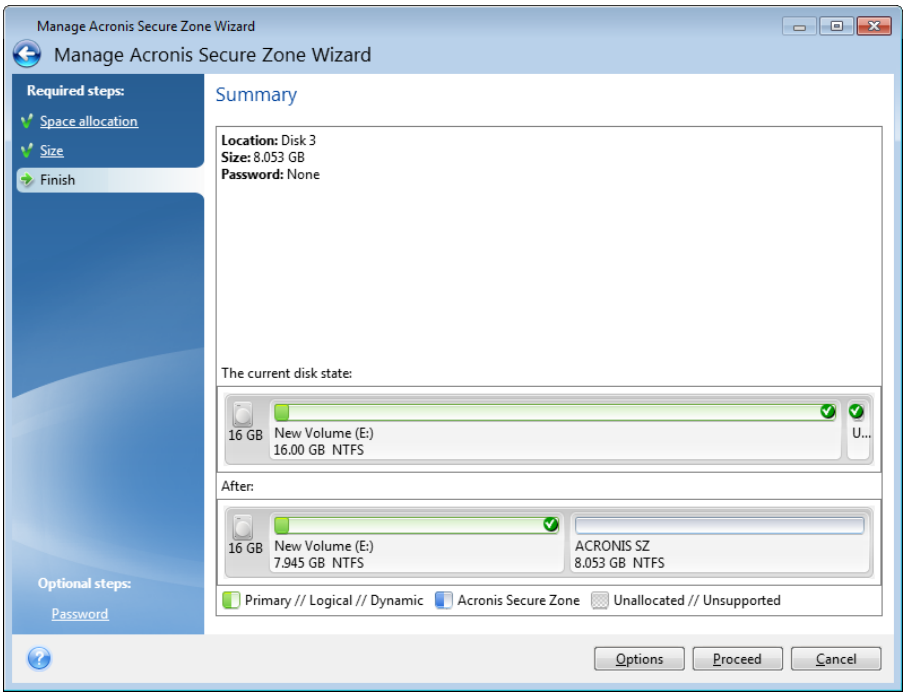
- Select the appropriate partition's check box, then click **Next**.

Acronis Secure Zone can be also removed while uninstalling the program. You will have a choice between uninstallation of the program without removing Acronis Secure Zone and removing software along with Acronis Secure Zone.

Acronis Secure Zone deletion will automatically destroy all backups stored in the zone.

7.3.6 Acronis Secure Zone summary

The Acronis Secure Zone summary window displays a list of operations to be performed. Creating or managing the Acronis Secure Zone operations may require reboot. In that case, after clicking the **Proceed** button you will be asked to confirm the reboot.



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Click the **Proceed** button to start the listed operations.

Click the **Options** button if you want to protect Acronis Secure Zone with a password.

Click the **Cancel** button to exit the wizard without performing any operations.

7.4 Cloning a hard disk

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7.4.1 General information

Sooner or later, most computer users find that their hard disk is too small. If you just don't have space for more data, you can add another disk just for data storage as described in the following chapter.

However, you might find that your hard disk does not have enough space for the operating system and installed applications, preventing you from updating your software or installing new applications. In this case, you have to transfer the system to a higher-capacity hard disk.

To transfer the system, you must first install the disk in the computer. If your computer doesn't have a bay for another hard disk, you can temporarily install it in place of your CD drive or use a USB 2.0 connection to the external target disk. If that is not possible, you can clone a hard disk by creating a disk image and recovering it to a new hard disk with larger partitions.

On program screens, damaged partitions are marked with a red circle and a white cross inside in the upper left corner. Before you start cloning, you should check such disks for errors and correct the errors using the appropriate operating system tools.

For best results, install the target (new) drive where you plan to use it and the source drive in another location, e.g. in an external USB enclosure. This recommendation is especially important for laptops.

Acronis True Image Home 2011 makes the data transfer procedure from one disk to another (disk cloning) quite easy and clear.

To clone a disk:

- Click **Tools & Utilities** in the main menu and then click **Clone disk** on the **Tools & Utilities** screen.
- Follow the **Disk Clone Wizard** steps.

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7.4.2 Security

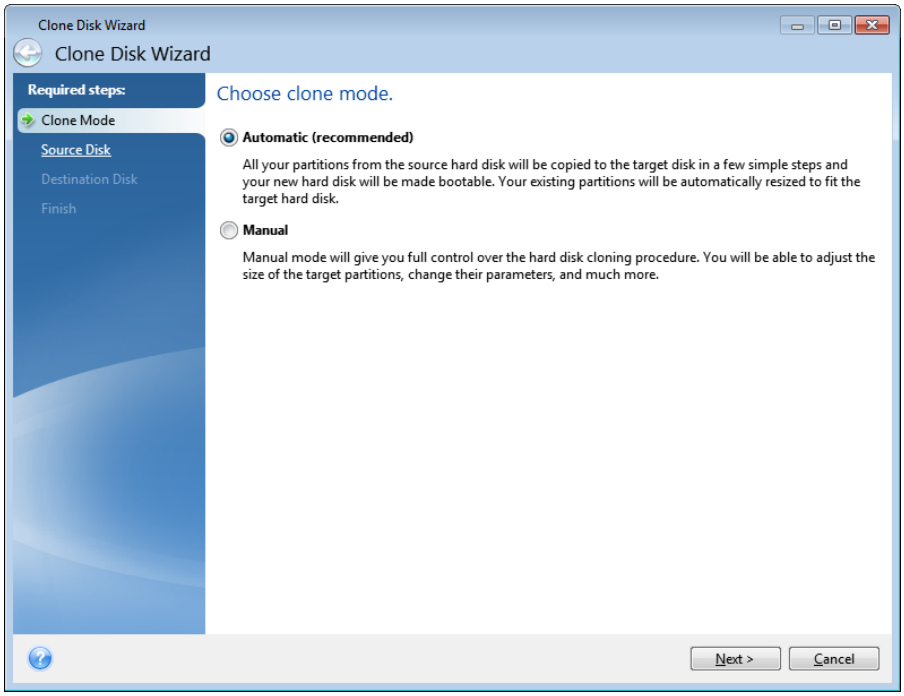
Please note the following: if the power goes off or you accidentally press **RESET** during the transfer, the procedure will be incomplete and you will have to partition and format or clone the hard disk again.

No data will be lost because the original disk is only being read (no partitions are changed or resized). The system transfer procedure does not alter the original disk at all. After the procedure finishes, you might want to format the old disk or securely wipe the data it contains. Use Windows tools or Acronis DriveCleanser for these tasks.

Nevertheless, we do not recommend that you delete data from the old disk until you are sure it is correctly transferred to the new disk, the computer boots up from it and all applications work.

7.4.3 Selecting clone mode

There are two transfer modes available:


Clone Disk Wizard
Clone Disk Wizard
Required steps:
Clone Mode
Source Disk
Destination Disk
Finish
Choose clone mode.
Automatic (recommended)
All your partitions from the source hard disk will be copied to the target disk in a few simple steps and your new hard disk will be made bootable. Your existing partitions will be automatically resized to fit the target hard disk.
Manual
Manual mode will give you full control over the hard disk cloning procedure. You will be able to adjust the size of the target partitions, change their parameters, and much more.
Next >
Cancel

- **Automatic** (recommended in most cases). In automatic mode, you will only have to take several simple actions to transfer all the data, including partitions, files and folders, to a newer disk, making it bootable if the original disk was bootable.
- **Manual**. Manual mode will provide more data transfer flexibility. Manual mode can be useful if you need to change the disk partition layout.

If the program finds two disks, one partitioned and another unpartitioned, it will automatically recognize the partitioned disk as the source disk and the unpartitioned disk as the destination disk. In such case, the next steps will be bypassed and you will be taken to the cloning Summary screen.

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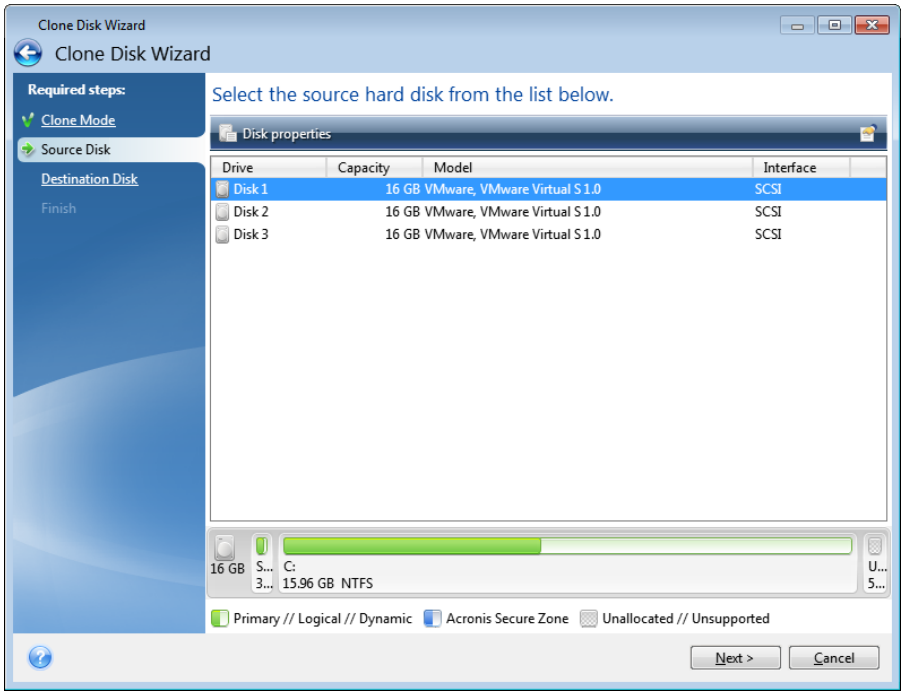
7.4.4 Selecting a source disk

You can determine the source and destination using the information provided in this window (disk number, capacity, label, partition and file system information). If the program finds several partitioned disks, it will ask you which is the source (i.e. the older data disk).



The current Acronis True Image Home 2011 version does not support cloning of dynamic and GPT disks.

- Select the source disk and click **Next** to continue.

Viewing disk and partition information

- Columns - selects the columns to display. You can change the width of a column by dragging its borders with the mouse.
- Disk properties (duplicated in the context menu, invoked by right-clicking objects) - opens the selected partition or disk properties window.

  This window contains two panels. The left panel contains the properties tree and the right describes the selected property in detail. The disk information includes its physical parameters (connection type, device type, size, etc.); partition information includes both physical (sectors, location, etc.), and logical (file system, free space, assigned letter, etc.) parameters.

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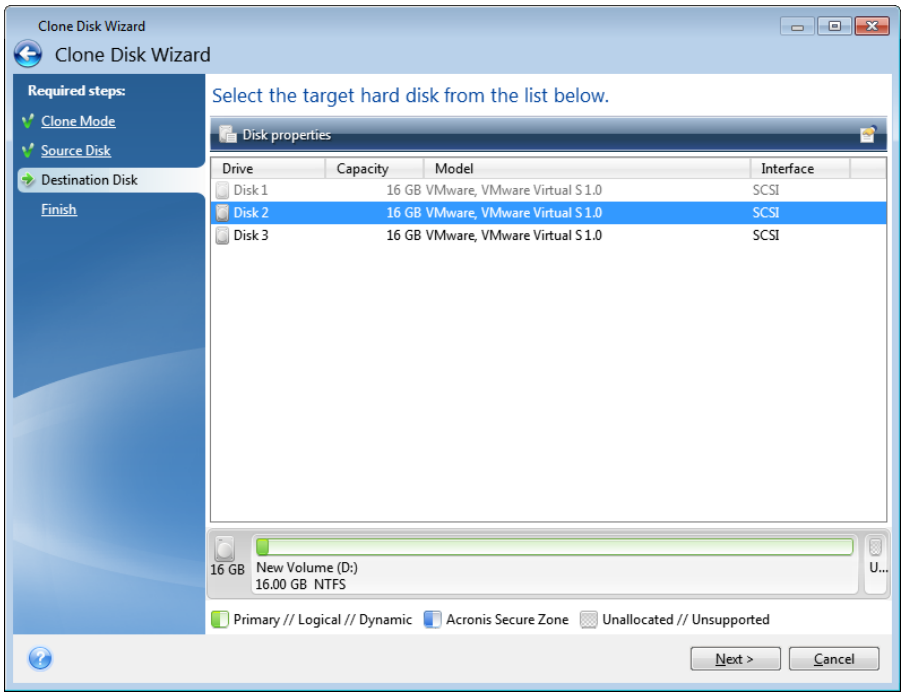
7.4.5 Selecting a destination disk

After you select the source disk, you have to select the destination where the disk information will be copied to. The previously selected source becomes grayed-out and disabled for selection.



- Select the destination disk and click **Next** to continue.

At this point, the program checks to see if the destination disk is free. If not, you will be prompted by the Conformation window stating that the destination disk contains partitions, perhaps with useful data. To confirm deletion of the partitions, click **OK**.

*Note that no real changes or data destruction will be performed at this time! For now, the program will just map out cloning. All changes will be implemented only when you click **Proceed**.*

If any disk is unpartitioned, the program will automatically recognize it as the destination and bypass this step.

7.4.6 Move method

When you select the manual cloning mode, Acronis True Image Home 2011 will offer you the following data move methods:

- **As is** - a new partition will be created for every old one with the same size and type, file system and label. The unused space will become unallocated.
- **Proportional** - the new disk space will be proportionally distributed between cloned partitions

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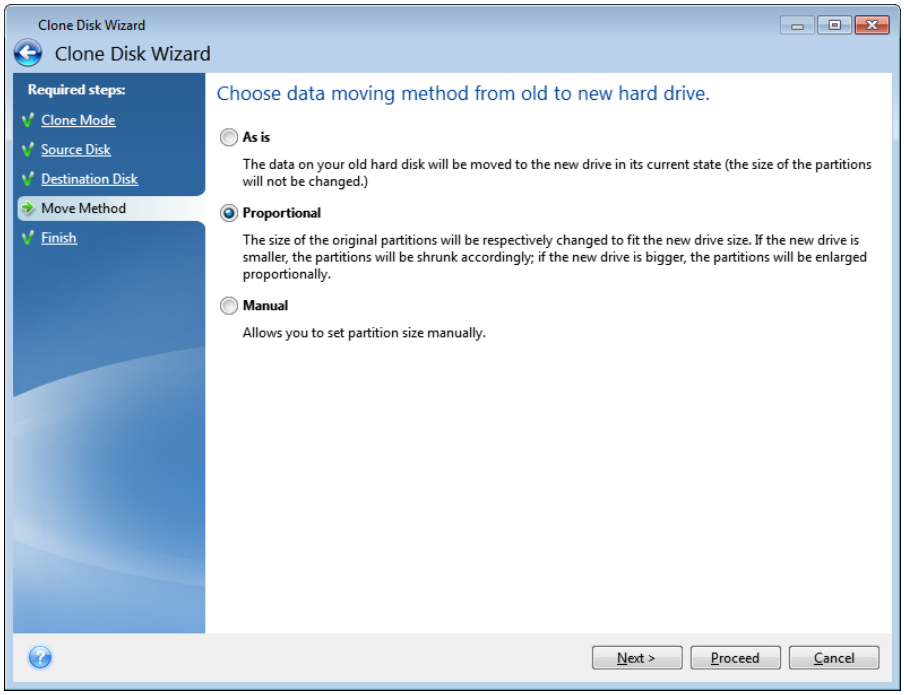
- **Manual** - you will specify a new size and other parameters yourself


Clone Disk Wizard
Clone Disk Wizard
Required steps:
Clone Mode
Source Disk
Destination Disk
Move Method
Finish
Choose data moving method from old to new hard drive.
As is
The data on your old hard disk will be moved to the new drive in its current state (the size of the partitions will not be changed.)
Proportional
The size of the original partitions will be respectively changed to fit the new drive size. If the new drive is smaller, the partitions will be shrunk accordingly; if the new drive is bigger, the partitions will be enlarged proportionally.
Manual
Allows you to set partition size manually.
Next >
Proceed
Cancel

If you elect to transfer information "as is," a new partition will be created for every old one with the same size and type, file system and label. The unused space will become unallocated. Afterwards, you will be able to use the unallocated space to create new partitions or to enlarge the existing partitions with special tools, such as Acronis Disk Director Suite.

As a rule, "as is" transfers are not recommended as they leave a lot of unallocated space on the new disk. Using the "as is" method, Acronis True Image Home 2011 transfers unsupported and damaged file systems.

If you transfer data proportionally, each partition will be enlarged, according to the proportion of the old and new disk capacities.

FAT16 partitions are enlarged less than others, as they have a 4GB size limit.

Depending on the selected combination, you will proceed to either the cloning summary window, or the Change disk layout step (see below).

7.4.7 Manual partitioning

The manual transfer method enables you to resize partitions on the new disk. By default, the program resizes them proportionally.

This window displays rectangles indicating the source hard disk, including its partitions and unallocated space, as well as the new disk layout.

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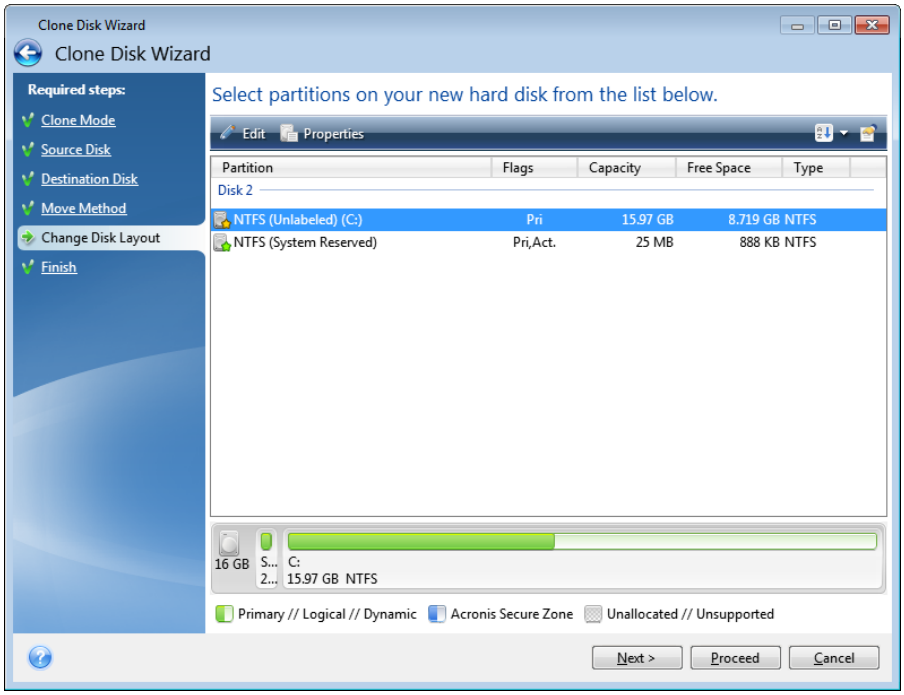
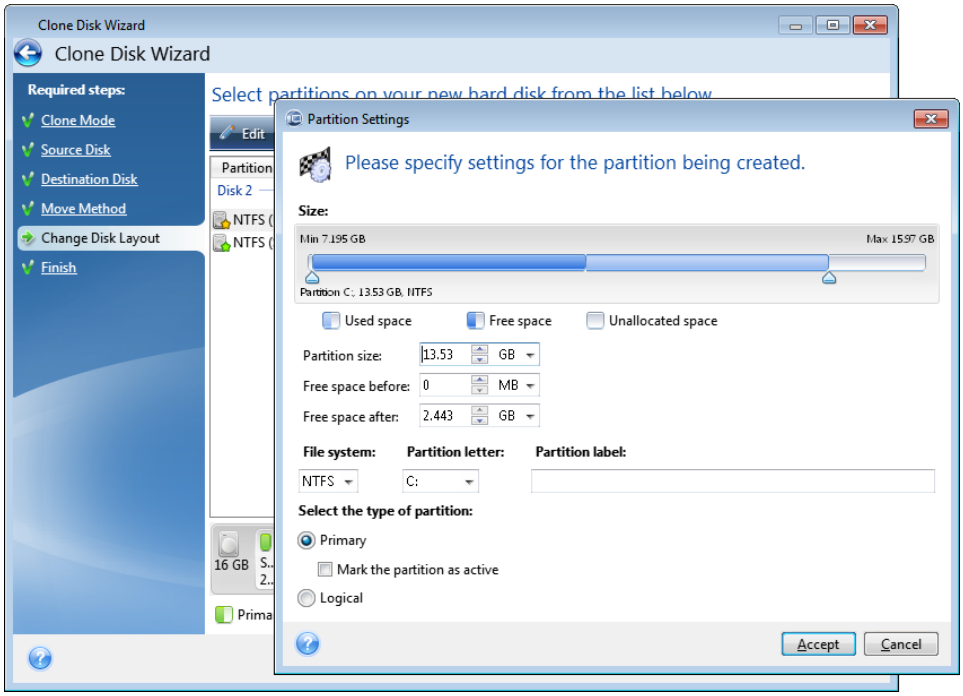
Along with the hard disk number, you can see disk capacity, the label, volume and file system information. Different volume types, including primary, logical and unallocated space are marked with different colors.



To resize, change the volume type, change the label of the existing volume, right click on it, and select **Edit** in the shortcut menu. This will open the Partition Settings window.



You can do this by entering values in the **Free space before**, **Partition size**, **Free space after** fields, by dragging partition borders or the partition itself.

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If the cursor turns into two vertical lines with left and right arrows, it is pointed at the partition border and you can drag it to enlarge or reduce the partition's size. If the cursor turns into four arrows, it is pointed at the partition, so you can move it to the left or right (if there's unallocated space near it).

Having provided the new location and size, click **Accept**. You will be taken back to the Change disk layout window. You might have to perform some more resizing and relocation before you get the layout you need.

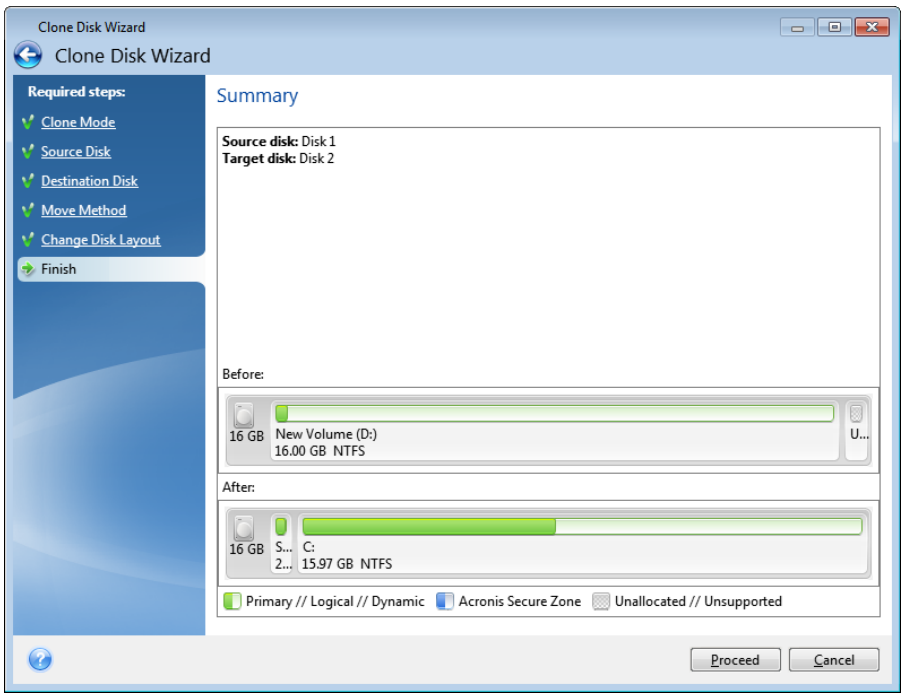
By clicking **Next** you will proceed to the Cloning summary window.

Be careful!

Clicking any previous wizard step on the sidebar in this window will reset all size and location changes that you've selected, so you will have to specify them again.

7.4.8 Cloning summary

The cloning summary window graphically (as rectangles) illustrates information about the source disk (partitions and unallocated space) and the destination disk layout. Along with the disk number, some additional information is provided: disk capacity, label, partition and file system information. Partition types — primary, logical and unallocated space — are marked with different colors.



- Click **Proceed** to start disk cloning.
- Click **Cancel** to cancel the procedure and quit to the main program window.

Cloning a disk containing the currently active operating system will require a reboot. In that case, after clicking **Proceed** you will be asked to confirm the reboot. Canceling the reboot will cancel the entire procedure. After the clone process finishes you will be offered an option to shut down the computer by pressing any key. This enables you to change the position of master/slave jumpers and remove one of the hard drives.

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Cloning a non-system disk or a disk containing an operating system, but one that is not currently active, will proceed without the need to reboot. After you click **Proceed**, Acronis True Image Home will start cloning the old disk to the new disk, indicating the progress in a special window. You can stop this procedure by clicking **Cancel**. In that case, you will have to repartition and format the new disk or repeat the cloning procedure. After the cloning operation is complete, you will see the results message.

7.5 Adding a new hard disk

If you do not have enough space for your data (e.g. family photos and videos), you can either replace the old disk with a new higher-capacity one (data transfers to new disks are described in the previous chapter), or add a new disk only to store data, leaving the system on the old disk. If the computer has a bay for another disk, it would be easier to add a disk drive than to clone one.

To add a new disk, you must first install it in your PC.

To add a new hard disk:

- Click **Tools & Utilities** in the main menu and then click **Add new disk** on the **Tools & Utilities** screen.
- Follow the Add new disk Wizard steps

*If there are any partitions on the new disk, they must be deleted first. If the added disk contains partitions, Acronis will warn you by displaying the warning message. Click **OK** to delete the existing partitions on the added disk.*

In this section

Selecting a hard disk 179
Creating new partitions.....179
Add new disk summary.....182

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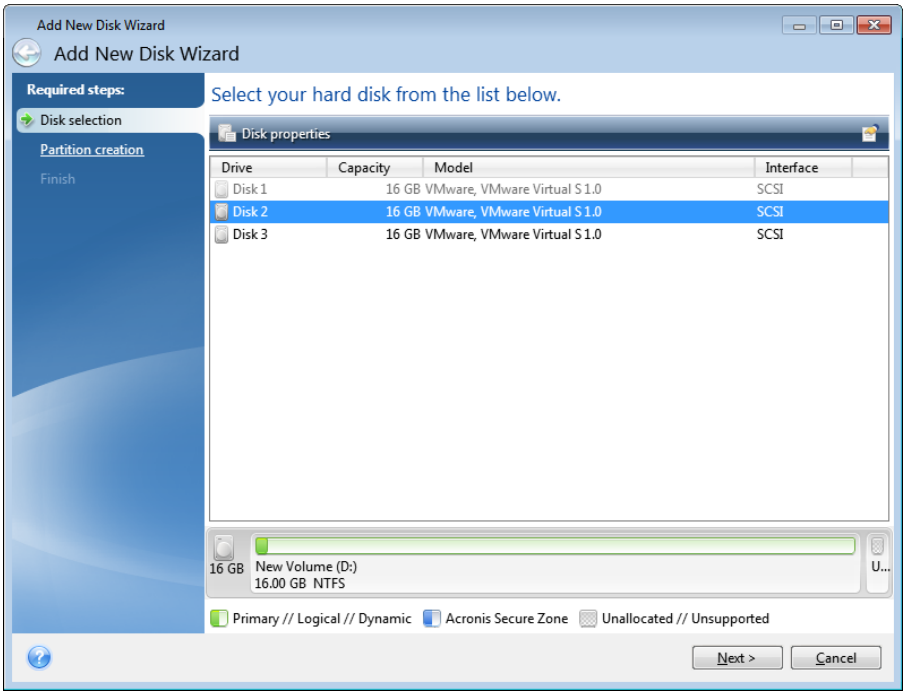
7.5.1 Selecting a hard disk

Select the disk that you have added to the computer. If you have added several disks, select one of them and click **Next** to continue. You can add the other disks later by restarting the Add New Disk Wizard.



You can also see the properties of all the hard disks installed in your system, e.g. the name and the model of the selected disk drive, its capacity, file system and its interface.

7.5.2 Creating new partitions

In order to use the space on a hard disk, it must be partitioned. Partitioning is the process of dividing the hard disk's space into logical divisions. Each logical division may function as a separate disk with an assigned drive letter, its own file system, etc. Even if you do not intend to divide your hard disk into logical divisions it must be partitioned so that the operating system knows that it is intended to be left in one piece.

Initially, all disk space will be unallocated. This will change after you add new partitions.

To create a new partition:

- Select the unallocated space and click **Create new partition** in the upper part of the window, or right click on the unallocated space, and select **Create new partition** in the shortcut menu.
- Specify the following settings for the partition being created:
  - the size of the new partition,
  - file system of the new partition,
  - partition type,

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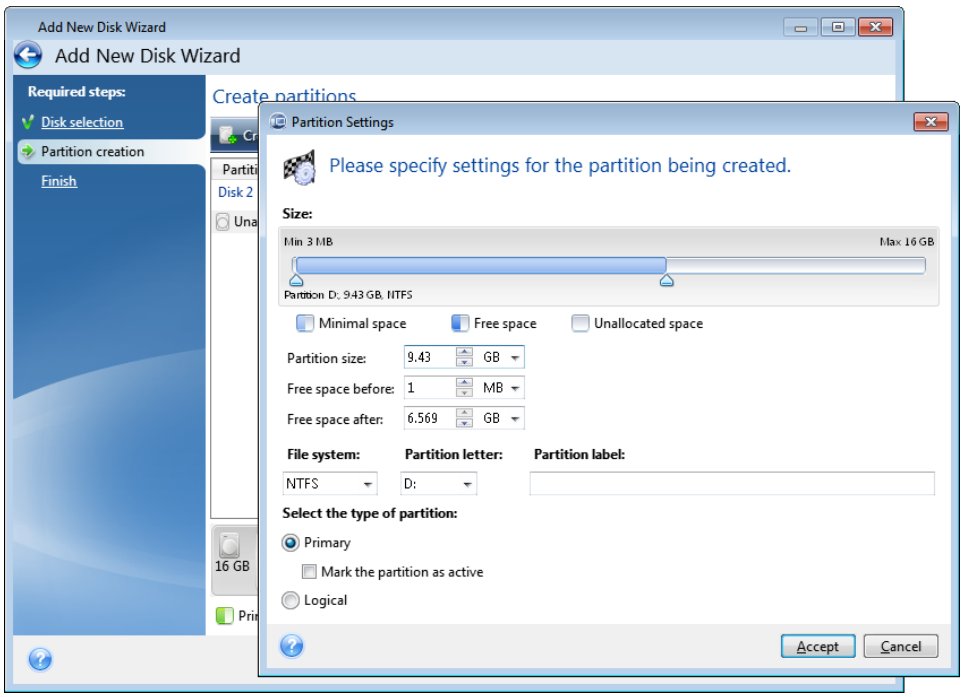
- partition letter and label.



If you allocate all unallocated space on the disk to the new partition, the **Create new partition** button disappears.

7.5.2.1 Partition settings

Specify the settings for the partition being created.

Size

You can resize and relocate the partition being created.

If you want to resize the partition:

- Point the cursor at the partition border. If the cursor is pointed exactly at the partition border, it will change into two vertical lines with arrows on each side.
- Hold down the left mouse button and drag the selected partition border to enlarge or reduce the partition size.

You can also set the size of the partition manually, by typing-in the desired partition size in the **Partition Size** field.

If you want to relocate the partition:

- Point the cursor at the partition. The cursor will change into a crosshair.
- Hold down the left mouse button and drag the partition until you get the necessary size of the **Free space before** and/or **Free space after** fields. You can also set the amount of unallocated space before or after the selected partition by manually typing-in the necessary value in the respective fields.

If you create one or more logical drives, the program will reserve some unallocated space for system needs in front of the created partition(s). If you create a primary partition or a primary partition together with a logical

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one then no unallocated space will be reserved for system needs. Later, you may convert this unallocated area into a primary disk if there is any need for it.

File System

Choose the file system type for partition being created and click **Next** to continue. Different partitions may have different type of file system.

You can either leave the partition unformatted, or choose between the following file system types:

- **NTFS** is a Windows NT, Windows 2000, Windows XP, Windows Vista, and Windows 7 native file system. Choose it if you use these operating systems. Note, that Windows 95/98/Me and DOS cannot access NTFS partitions.
- **FAT 32** is an improved 32-bit version of the FAT file system that supports volumes up to 2 TB.
- **FAT 16** native DOS system. Most operating systems recognize it. However, if your disk drive is more than 4 GB, it is not possible to format it in FAT16.
- **Ext2** is a Linux native file system. It is fast enough, but it is not a journaling file system.
- **Ext3** – officially introduced with Red hat Linux version 7.2, Ext3 is a Linux journaling file system. It is forwards and backwards compatible with Linux Ext2. It has multiple journaling modes, as well as broad, cross platform compatibility in both 32-bit and 64-bit architectures.
- **ReiserFS** is a journaling file system for Linux. Generally it is more reliable and faster than Ext2. Choose it for your Linux data partition.
- **Linux Swap** is a swap partition for Linux. Choose it if you want to add more swap space using Linux

Partition type

In order to use the space on a hard disk, it must be partitioned. Partitioning is the process of dividing the hard disk's space into logical divisions. Each logical division may function as a separate disk with an assigned drive letter, its own file system, etc. Even if you do not intend to divide your hard disk into logical divisions, it must be partitioned so that the operating system knows that it is intended to be left in one piece.

Choose the type of partition to be created. You can define the new partition as primary or logical.

- **Primary** - choose this parameter if you are planning to boot from this partition. Otherwise, it is better to create a new partition as a logical drive. You can have only four primary partitions per drive, or three primary partitions and one extended partition.

  Note: If you have several primary partitions, only one will be active at a time, the other primary partitions will be hidden and won't be seen by the OS.

  - **Mark the partition as active** - an active partition is used for loading an operating system. Selecting Active for a partition without an installed operating system could prevent your computer from booting.
- **Logical** - choose this parameter if you don't intend to install and start an operating system from the partition. A logical drive is part of a physical disk drive that has been partitioned and allocated as an independent unit, but functions as a separate drive.

  Note: if you create one or more logical drives, the system will reserve some unallocated space for system needs in front of created partition(s). If you create a primary partition or a primary partition together with a logical one, then no unallocated space will be reserved for system needs. Later on, you may convert this unallocated area into a primary disk if there is any need for it.

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Partition letter

Select a letter to be assigned to the partition being created from the drop-down list. If **Auto** is selected, the program assigns the first unused drive letter in alphabetical order.

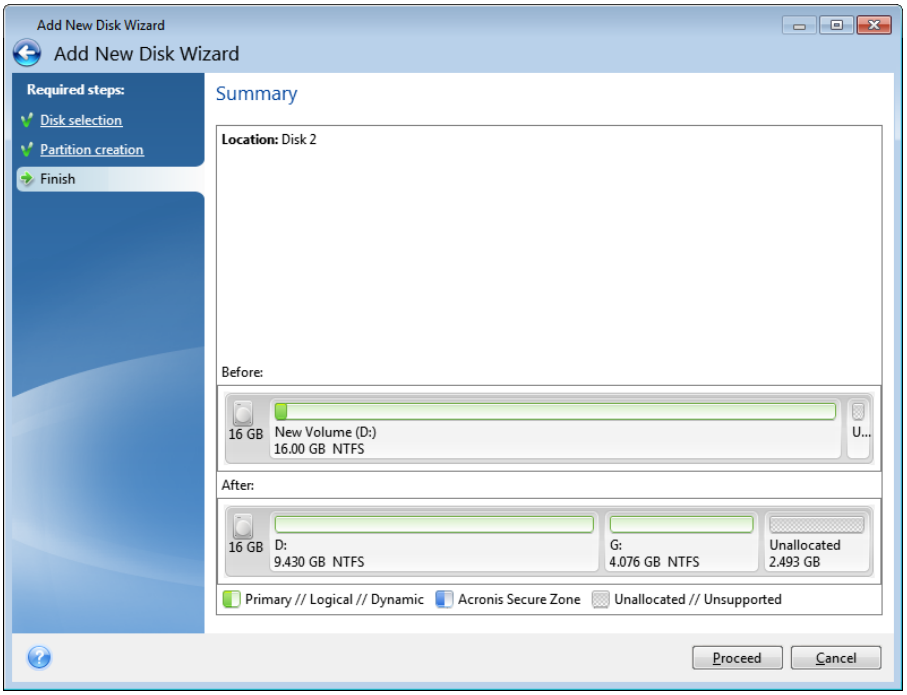
Partition label

Partition label is a name, assigned to a partition so that you can easily recognize it. For example, one could be called System — a partition with an operating system, Program — an application partition, Data — a data partition, etc. Partition label is an optional attribute.

Enter the label of the partition being created and click **Accept** to continue.

7.5.3 Add new disk summary

The Add new disk summary contains a list of briefly described operations to be performed on partitions (disks).



- Click **Proceed** to start creating new partition(s).
- Click **Cancel** to cancel the procedure and quit to the main program window.

After you click **Proceed**, Acronis True Image Home will start creating new partition(s), indicating the progress in a special window. If you stop this procedure by clicking **Cancel**, you will have to repartition and format the new disk or repeat the disk add procedure.

*Before clicking the **Proceed** button you can use the sidebar to navigate through the **Add New Disk Wizard** steps and make changes.*

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7.6 Security and Privacy Tools

Acronis True Image Home 2011 contains utilities for secure destruction of data on an entire hard disk drive, and individual partitions. It can also erase individual files and eliminate traces of user system activity.

When replacing your old hard drive with a new, higher-capacity one, you may accidentally leave personal and confidential information on the old disk. This information could be retrieved even if you have reformatted the disk.

The Acronis DriveCleanser provides for the destruction of confidential information on hard disk drives and/or partitions with the help of techniques that meet or exceed most national and state standards. You can select an appropriate data destruction method depending on the importance of your confidential information.

The File Shredder provides the same capabilities for individual files and folders.

Finally, the System Clean-up wizard ensures elimination of all of the traces of your computer activities When working on a PC, you leave thousands of bytes of evidence showing your actions. You may not even be aware of these traces. This could include user names and passwords, as well as other personal information that could be used to steal your identity if it fell into the wrong hands. This utility wipes them all completely away from the disk drive.

The data destruction methods are described in detail in Hard Disk Wiping methods (p. 198) of this guide.

In this section

Acronis DriveCleanser 183
File shredder 190
System Clean-up 192
Hard Disk Wiping methods 198

7.6.1 Acronis DriveCleanser

Many operating systems do not provide users with secure data destruction tools, so deleted files can be recovered easily by using simple applications. Even a complete disk reformat cannot guarantee permanent confidential data destruction.

Acronis DriveCleanser solves this problem with guaranteed and permanent data destruction on selected hard disks and/or partitions. It allows you to select from a number of data destruction algorithms depending on the importance of your confidential information.

Working with Acronis DriveCleanser

Acronis DriveCleanser allows you to perform the following:

- clean up the selected hard disks or partitions using preset algorithms
- create and execute custom user algorithms of hard disk clean-up.

Acronis DriveCleanser is based on a wizard that **scripts** all hard disk operations, so no data destruction is performed until you click **Proceed** in the wizard's Summary window. At any moment, you can return to the previous steps to select other disks, partitions or data destruction algorithms.

To permanently destroy data on your disk:

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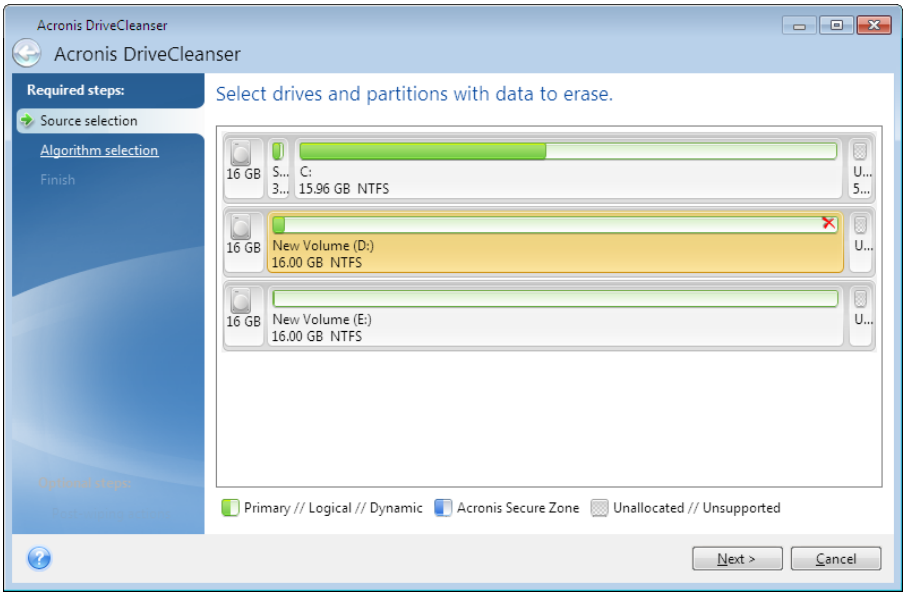
- Click **Tools & Utilities** on the toolbar, and select **Acronis DriveCleanser**.
- Follow the Acronis DriveCleanser wizard steps.

7.6.1.1 Data selection

First, you must select the hard disk partitions where you want to destroy data.



To select a partition, click the corresponding rectangle. You will see a red mark in the upper right corner indicating that the partition is selected.

You can select an entire hard disk or several disks for data destruction. To do this, click the rectangle corresponding to the hard disk (with a device icon, disk number and capacity).

You can simultaneously select several partitions located on different hard disk drives or on several disks, as well as unallocated space on disks.

Click **Next** to continue.

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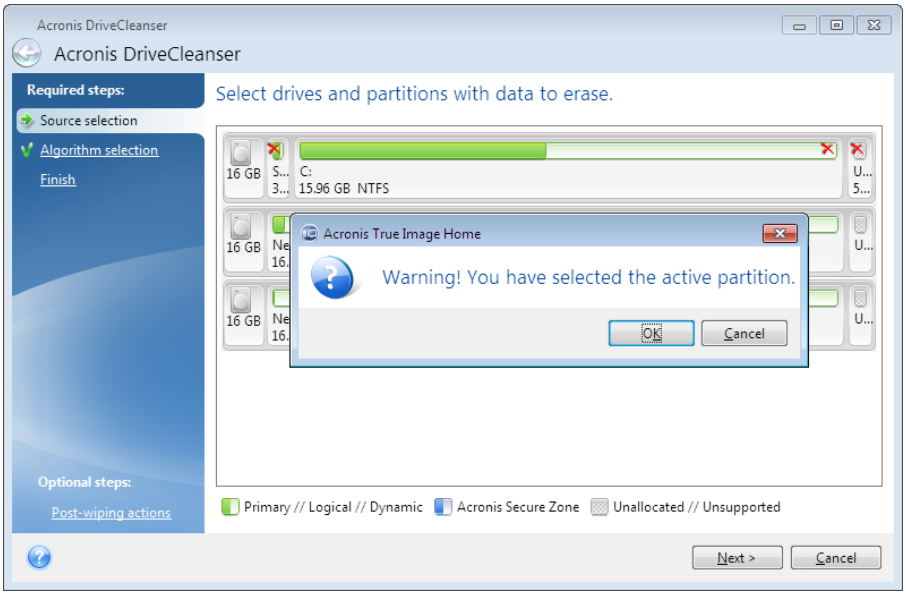
If the disks and/or partitions you have selected include the system disk or partition, you will see a warning window.

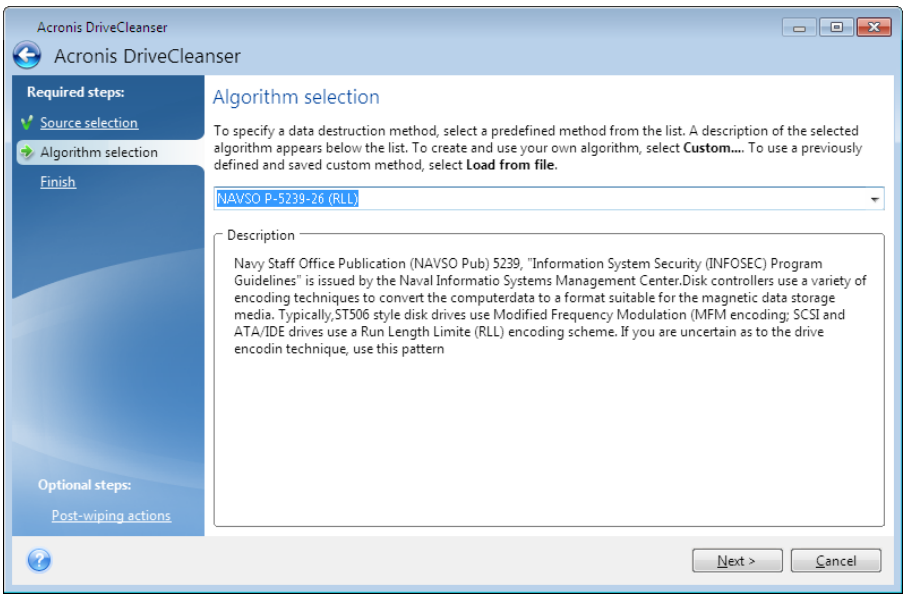


Be careful, because clicking **OK** in this warning window and then **Proceed** in the Summary window will result in wiping the system partition containing your Windows operating system.

7.6.1.2 Algorithm selection

Acronis DriveCleanser utilizes a number of the most popular data destruction algorithms. Select the desired algorithm from the drop-down list.

The data destruction methods are described in detail in Hard Disk Wiping Methods (p. 198) of this guide.


Acronis DriveCleanser
Acronis DriveCleanser
Required steps:
Source selection
Algorithm selection
Finish
Optional steps:
Post-wiping actions
Algorithm selection
To specify a data destruction method, select a predefined method from the list. A description of the selected algorithm appears below the list. To create and use your own algorithm, select Custom.... To use a previously defined and saved custom method, select Load from file.
NAVSO P-5239-26 (RLL)
Description
Navy Staff Office Publication (NAVSO Pub) 5239, "Information System Security (INFOSEC) Program Guidelines" is issued by the Naval Informatio Systems Management Center.Disk controllers use a variety of encoding techniques to convert the computerdata to a format suitable for the magnetic data storage media. Typically,ST506 style disk drives use Modified Frequency Modulation (MFM encoding; SCSI and ATA/IDE drives use a Run Length Limite (RLL) encoding scheme. If you are uncertain as to the drive encodin technique, use this pattern
Next >
Cancel

After you select an algorithm, Acronis DriveCleanser will perform all the actions necessary to destroy the contents of the selected partition or disk. After this is done, you will see a message indicating successful data destruction.

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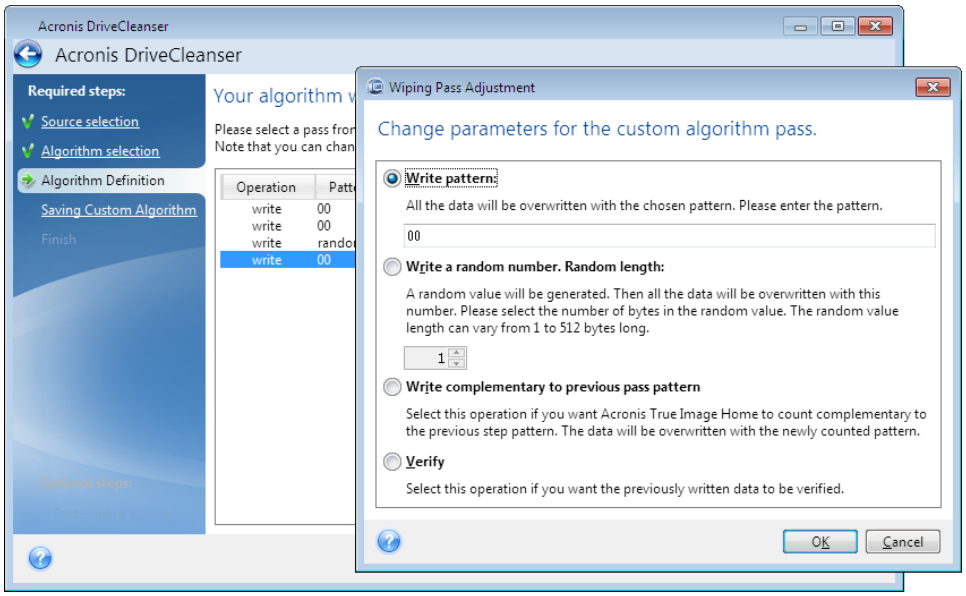
Acronis DriveCleanser offers you another useful capability — to estimate the results of executing a data destruction algorithm on a hard disk or partition. It features an integrated Disk Editor (hard disk browsing tool).

The aforementioned algorithms offer various levels of confidential data destruction. Thus the picture you might see on a disk or partition depends on the data destruction algorithm. But what you actually see are disk sectors filled with either zeros or random symbols.

Creating custom algorithms of data destruction

Acronis DriveCleanser gives you the opportunity to create your own algorithms for wiping hard disks. Although the software includes several levels of data destruction, you can choose to create your own. This is recommended only for users familiar with the principles of data destruction used in secure disk wiping methods.

To create a custom hard disk wiping algorithm, select and click the **Custom…** line from the drop-down list in the Algorithm selection window. In this case some new required steps appear in the DriveCleanser wizard and you will be able to create a data destruction algorithm matching your security requirements.


Acronis DriveCleanser
Acronis DriveCleanser
Required steps:
Source selection
Algorithm selection
Algorithm Definition
Saving Custom Algorithm
Finish
Your algorithm
Please select a pass fror
Note that you can chan
Operation
write 00
write 00
write
write 00
Wiping Pass Adjustment
Change parameters for the custom algorithm pass.
Write pattern:
All the data will be overwritten with the chosen pattern. Please enter the pattern.
00
Write a random number. Random length:
A random value will be generated. Then all the data will be overwritten with this number. Please select the number of bytes in the random value. The random value length can vary from 1 to 512 bytes long.
1
Write complementary to previous pass pattern
Select this operation if you want Acronis True Image Home to count complementary to the previous step pattern. The data will be overwritten with the newly counted pattern.
Verify
Select this operation if you want the previously written data to be verified.
OK
Cancel

Having created a custom method, you can save the algorithm you created. This will be handy if you are going to use it again.

Loading an algorithm from a file

If you created and saved your algorithm for data destruction while working with Acronis True Image Home 2011 software, you can use it in the following way:

In the Select algorithm window, choose **Load from file…** from the drop-down list and select the file with custom data destruction algorithm parameters. By default, such files have a *.alg extension.

Algorithm definition

The Algorithm definition window shows you a template of the future algorithm.

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The window has the following legend: The first column of the list contains the type of operation on a disk (there are just two: to write a symbol to disk, "writing"; and to verify written, "verification"); the second column contains the pattern of data to be written to disk.

The pattern to be written is always a hexadecimal value, for example, a value of this kind: 0x00, 0xAA, or 0xCD, etc. These values are 1 byte long, but they may be up to 512 bytes long. Except for such values, you may enter a random hexadecimal value of any length (up to 512 bytes). Your algorithm may also include one more value for writing that is designated as the «complementary value» – the value that is complementary to the one written to disk during the previous pass.

If the binary value is represented by the 10001010 (0x8A) sequence, then the complementary binary value will be represented by the 01110101 (0x75) sequence.

The Algorithm definition window offers you the template for the algorithm only. You should define exactly what the software should write to disk to destroy the confidential data according to your algorithm.

To do this, click your mouse on the line representing pass #1 and click **Edit**.

Wiping pass adjustment

The Wiping Pass Adjustment window allows you to define the pattern to be written to disk (hexadecimal value).

This is what the window control elements mean: You may enter any hexadecimal value into the field under the **Write pattern** switch to write it to a hard disk during any pass (during the first pass in this case).

By setting the switch to **Write a random number** position, you will first select to write a random value to disk, and specify the length of the random value in bytes in the field below.

The U.S. standard provides the writing of random values to each byte of each disk sector during the first pass, so set the switch to **Write a random number** position and enter 1 into the field.

Click the **OK** button to continue.

You will be taken to the algorithm definition window again and will see that the former record (write – 00) was replaced by write – random, 1 byte.

To define the next pass, click the **Add** button.

You will see the already-familiar window, but this time there will be more switch positions available: two additional positions will be available for selection:

- **Write complementary to previous pass pattern**: As during the second pass of the U.S. standard, each disk sector is filled with hexadecimal values that are complementary to those written during the previous pass. Therefore you should set the switch to the Write complementary to previous pass pattern position and click the **OK** button.

  You will be taken to the algorithm definition window again. In this window, the second record looks like this: write – complementary to previous step pattern.
- **Verify**

Following the U.S. data destruction standard specification, define third and fourth data overwriting passes.

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In the same way, you can create any data destruction algorithm to match your security requirements.

Saving custom algorithm

In the next Saving Custom Algorithm window, you will be able to save the algorithm you have created. This will be useful if you are going to use it again.

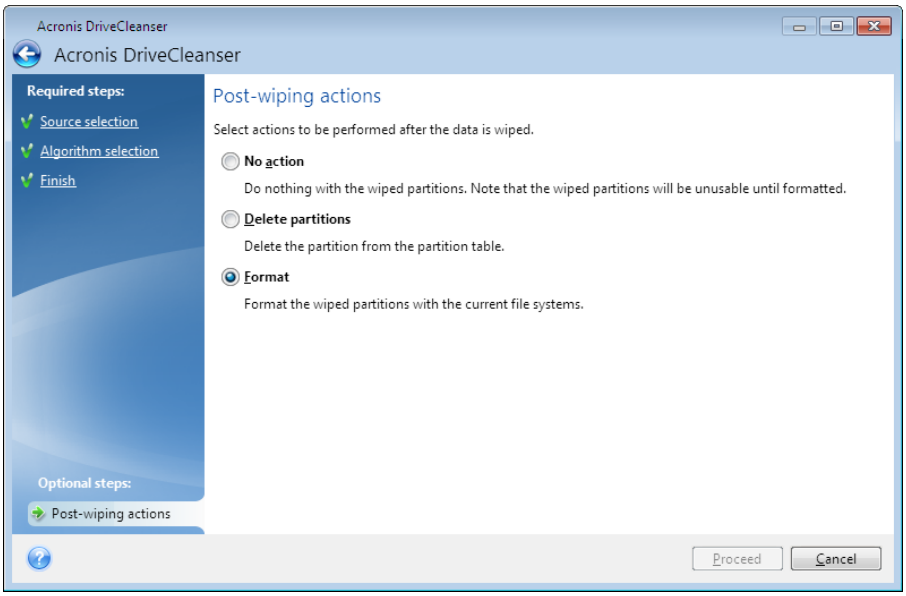
In order to save your algorithm, you need to give it a filename and define the path in the Select file field or locate an existing file on the disk.

Each custom algorithm is stored in a separate file with its own name. If you try to write a new algorithm to an already existing file, the existing file's contents will be erased.

7.6.1.3 Post-wiping actions

In the Post-wiping actions window, you can select actions to be performed on the partitions selected for data destruction. Acronis DriveCleanser offers you three options:

- **No action** — just destroy data using the algorithm selected below
- **Delete partition** — destroy data and delete partition
- **Format** — destroy data and format partition (default).



Acronis DriveCleanser cannot delete partitions on dynamic disks, so if you select to wipe only dynamic disks, the **Delete partition(s)** option will be unavailable. If you select partitions on both basic and dynamic disks, Acronis DriveCleanser will leave the dynamic ones as is, after completing the wiping.

7.6.1.4 Disk wiping summary

The summary window contains the list of operations to be performed.

Note that after you click the **Proceed** button, the selected partitions will be wiped permanently. So the button is disabled until you select the **Wipe the selected partitions irreversibly** check box.

Click the **Proceed** button to start the listed operations.

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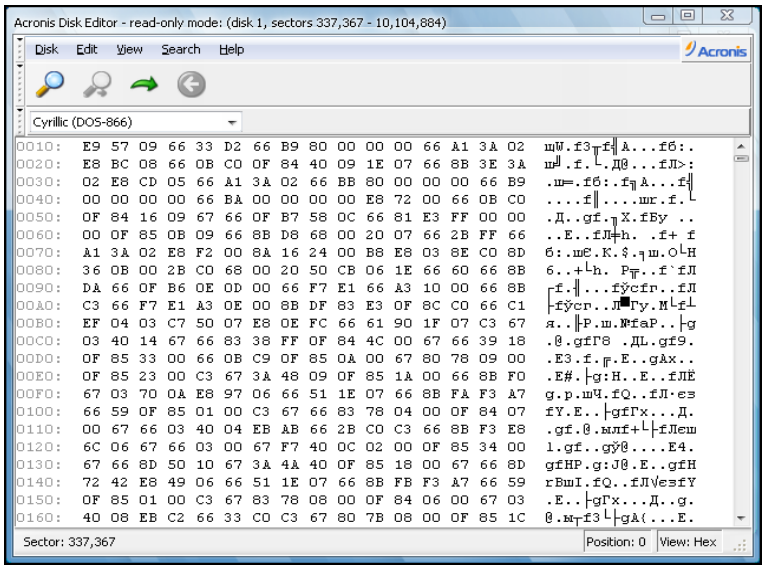
Click the **Options** button to perform the optional steps.

Click the **Cancel** button to exit the wizard without performing any operations.

7.6.1.5 Disk Editor (read-only mode)

Acronis DriveCleanser offers you another useful capability — to estimate the results of executing a data destruction method on a hard disk or partition. To view the state of your cleaned up disks or partitions, click **Tools & Utilities** on the toolbar. Then click the **View current state of your disks** link and choose the partition whose cleaning results you wish to view. This opens an integrated Acronis Disk Editor (in read-only mode).

Different algorithms offer various levels of confidential data destruction. Thus the picture you might see on a disk or partition depends on the data destruction method. But what you actually see are disk sectors filled with either zeros or random symbols.



Hard disk content search

The **Search** menu allows you to search a hard disk for a line and to go to a disk sector according to its absolute offset.

Selecting the **Search** item in the same menu will give you access to functions of searching lines in the disk being edited. (You can do the same by pressing the **Ctrl + F** key combination.) Search parameters are set in the **Search** dialog window.

To begin searching:

- A search line can be set both as a char (**Text** field), and numeric (hexadecimal) value (**Hex** field). When you type text in the **Text** field, it will be automatically converted to hexadecimal value in the **Hex** field, and vice versa.
- Check the **Case sensitive** parameter to consider a letter case. If you selected a search mode without letter case matching, not only the case but also elements of the above characters will be ignored for Roman character sets.
- Check the **Search at sector offset** parameter to search for a given line at a given offset inside the sector

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- Click **OK** to begin searching. After the search process is finished, the current position will be moved to where a line was found, or will remain the same if no lines were found. You can search for the next line from the current position by selecting the **Search again** item in the **Search** menu or by pressing the **F3** key.

Go to sector

You can go to the necessary sector according to its absolute offset by selecting the **Go to…** line in the **Search** menu (or by pressing the **Alt+P** key combination). Selecting this line opens the **Go to…** dialog window.

The transition is performed by entering the absolute sector offset, or cylinder, head, and sector numbers. The listed parameters are bound by this expression:

(CYL x HDS + HD) x SPT + SEC – 1

Where CYL, HD, SEC are numbers of the cylinder, head, sector in the CHS co-ordinates (Cylinder – Head – Sector); HDS is the number of heads per disk, SPT is the number of sectors per track.

You can return to a sector from another one by selecting the **Back** item in the **Search** menu (or by pressing the **Ctrl+Backspace** key combination).

7.6.2 File shredder

The **File shredder** enables quick, permanent destruction of selected files and folders.

To permanently destroy files and folders:

- Click **Tools & Utilities** in the main menu and then click **File shredder** on the **Tools & Utilities** screen.
- Follow the File shredder wizard steps.

7.6.2.1 Select files/folders

Select the files and/or folders you wish to shred.

To select files and/or folders:

- Expand the drives tree and select the files and/or folders you need to shred. You can select a random set of files, folders and even disks. Be careful when selecting the contents for shredding to avoid the loss of necessary data.

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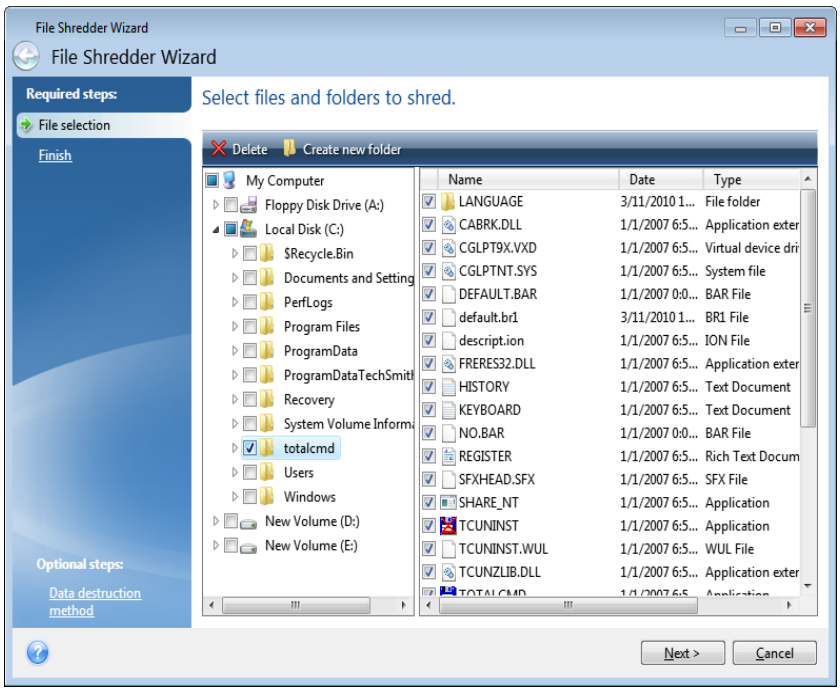
- Having selected the contents for shredding, click **Next** to continue.



7.6.2.2 Data destruction method selection

File Shredder utilizes a number of the most popular data destruction methods. Here, you need to select the desired data destruction method.

The data destruction methods are described in detail in Hard Disk Wiping Methods (p. 198) of this guide.

Clicking **Proceed** after you select the desired method will start the operation execution (if the **Proceed** button is unselectable, click **Finish** on the sidebar and select the **Destroy the selected files and folders irreversibly** box to enable the **Proceed** button).

7.6.2.3 Shredding summary

The final window displays a brief summary: the list of selected files and/or folders to be destroyed and data destruction method used.

Note that after you click the **Proceed** button, the selected files and folders will be destroyed permanently. So the button is disabled until you select the **Destroy the selected files and folders irreversibly** check box.

Click the **Proceed** button to destroy the selected files and/or folders permanently.

Click the **Options** button to perform the optional steps.

Click the **Cancel** button to exit the wizard without performing any operations.

Shredding operation progress

The operation status window reports about the state of the current operation.

The progress bar indicates the level of completion of the selected operation.

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In some cases, the operation may take a long time to be completed. If this is the case, select the **Shutdown the computer after completion** check box. When the operation finishes, Acronis True Image Home 2011 will turn the computer off.

7.6.3 System Clean-up

The System Clean-up wizard enables you to securely remove all traces of your PC actions stored by Windows.

It can carry out the following operations:

- Securely destroy data in the **Windows Recycle Bin**
- Remove **temporary files** from appropriate Windows folders
- Clean up **hard disk free space** of any traces of information previously stored on it
- Remove traces of **file and computer searches** on connected disks and computers in the local area network
- Clean the **recently used documents** list
- Clean the **Windows Run** list
- Clean the **opened/saved files** history
- Clean the list of network places to which the user has connected using **network credentials**
- Clean the **Windows prefetch directory**, where Windows stores information about programs you have executed and run recently

Windows Vista and Windows 7 do not store information on file and computer searches. Furthermore, information on opened/saved files is stored differently in the registry, so the wizard shows this information in a different way.

*****

Please, be aware that Windows stores passwords until the session ends, so cleaning the list of network user credentials will not take effect until you end the current Windows session by logging out or by rebooting the computer.

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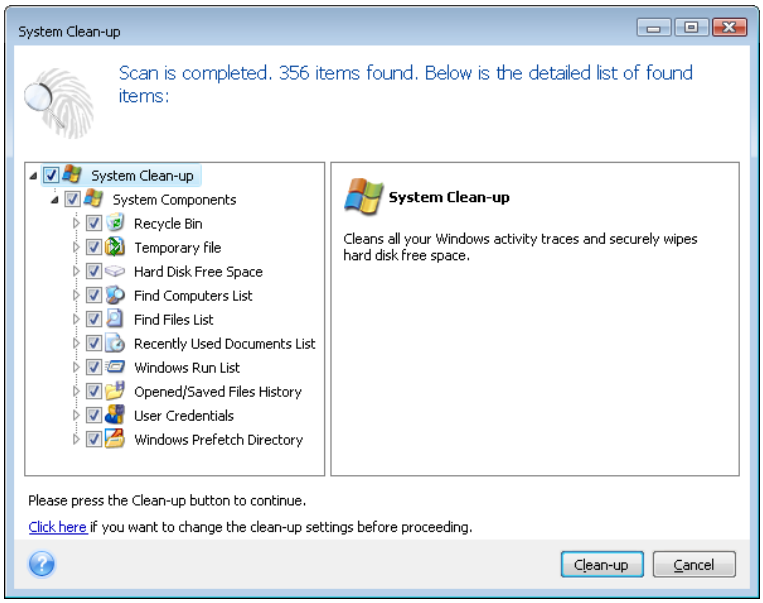
After you run the wizard by selecting **Tools & Utilities** → **System Clean-up** in the main program menu, it will search for any traces of user actions stored by Windows. When the search is finished, its results will be available at the top of the wizard window.


System Clean-up
Scan is completed. 356 items found. Below is the detailed list of found items:
System Clean-up
System Components
Recycle Bin
Temporary file
Hard Disk Free Space
Find Computers List
Find Files List
Recently Used Documents List
Windows Run List
Opened/Saved Files History
User Credentials
Windows Prefetch Directory
System Clean-up
Cleans all your Windows activity traces and securely wipes hard disk free space.
Please press the Clean-up button to continue.
Click here if you want to change the clean-up settings before proceeding.
Clean-up
Cancel

You can view the search results and manually select the items you wish to remove.

If you want to change the default system clean-up settings, click the corresponding link in the first window of the System Clean-up wizard.

Click **Clean-up** to launch removing the found items.

7.6.3.1 Clean-up settings

In the clean-up settings window you can change the clean-up settings for every system component. Some of these settings apply to all components.

To change the clean-up settings for a component:

- Expand the **System Components** item in the tree and select the component clean-up settings which you need to change. You can enable or disable scanning of the component by the Clean-up wizard. To do this, select or clear the **Enable** check box.

  If required, you can also expand a component and customize the desired data destruction method, files to clean, clean-up registry search strings you have used for finding computers in the local network, etc. To do this, click the triangle near the component, select an option from the list and specify the settings.
- After you set the desired components' properties, click **OK** to save your settings. These settings will be used as default next time you launch the Clean-up wizard.

If you have already changed the clean-up settings before, you can always return to the program defaults by clicking the **Restore Defaults** button.

System components:

- Recycle Bin

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- Temporary files
- Hard disk free space
- Find Computer list
- Find File list
- Recently Used Documents list
- Windows Run List
- Opened/saved files history
- User Credentials
- Windows Prefetch Directory

7.6.3.2 Default clean-up options

The default clean-up options are available by clicking the **Click to change this setting…** link on the **Data Destruction Method** option page.

To change the default clean-up options:

- Choose on the tree the component clean-up settings which you need to change.
- After you change the options, click **OK** to save your settings.

If you have already changed the clean-up settings before, you can always return to the program defaults by clicking the **Restore Defaults** button.

General

By default, the summary dialog window is displayed after each clean-up procedure ends (the **Show summary** check box is selected). If you do not need this window to be displayed, uncheck the box.

Clean-up options

System Clean-up utilizes a number of the most popular data destruction methods. Here, you can select the common data destruction method which will be used by default for all other components.

The data destruction methods are described in detail in Hard Disk Wiping Methods (p. 198) of this guide.

7.6.3.3 Specific clean-up options

You can customize the following clean-up options:

- Data destruction method
- Default options
- Files
- Drive free space
- Computers
- Commands
- Network places filter

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Data destruction method

System Clean-up utilizes a number of the most popular data destruction methods. Here, you need to select the desired data destruction method.

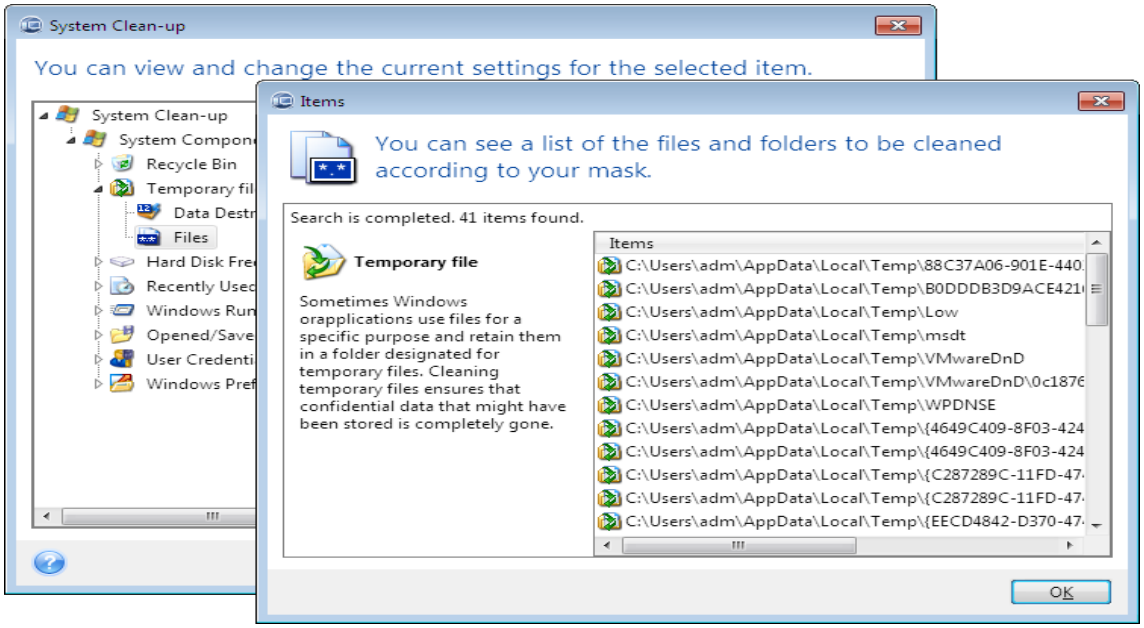
- **Use common method** - if you leave this parameter selected, the program will use the default method (the initial setting is Fast method).

  If you need another destruction method to be set as a default, click on the corresponding link.
- **Use custom method for this component** - selecting this parameter allows you to choose one of the preset data destruction methods from the drop-down list.

The data destruction methods are described in detail in Hard Disk Wiping Methods (p. 198) of this guide.

Files

The Files setting defines the names of files to clean with System Clean-up wizard and can be used with a search string.



Under the Windows operating system, a search string can represent a full or partial filename. A search string can contain any alphanumeric symbols, including commas and Windows wildcard symbols, and can have values similar to the following:

- *.* – to clean all files with any file names and extensions.
- *.doc – to clean all files with a specific extension – Microsoft document files in this case .
- read*.* – to clean all files with any extensions, and names beginning with "read".
- read?.* – to clean all files having five-letter names and any extensions, names beginning with "read"; the fifth letter is random.

  The last search string, for example, will result in the removal of read1.txt, ready.doc files, but readyness.txt will remain with its longer name (excluding the extension)

You can enter several different search strings separated by semicolons; for example:

.bak;.tmp;*.~~~ (without spaces between the search strings)

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All files with names corresponding to at least one of the search strings will be cleaned.

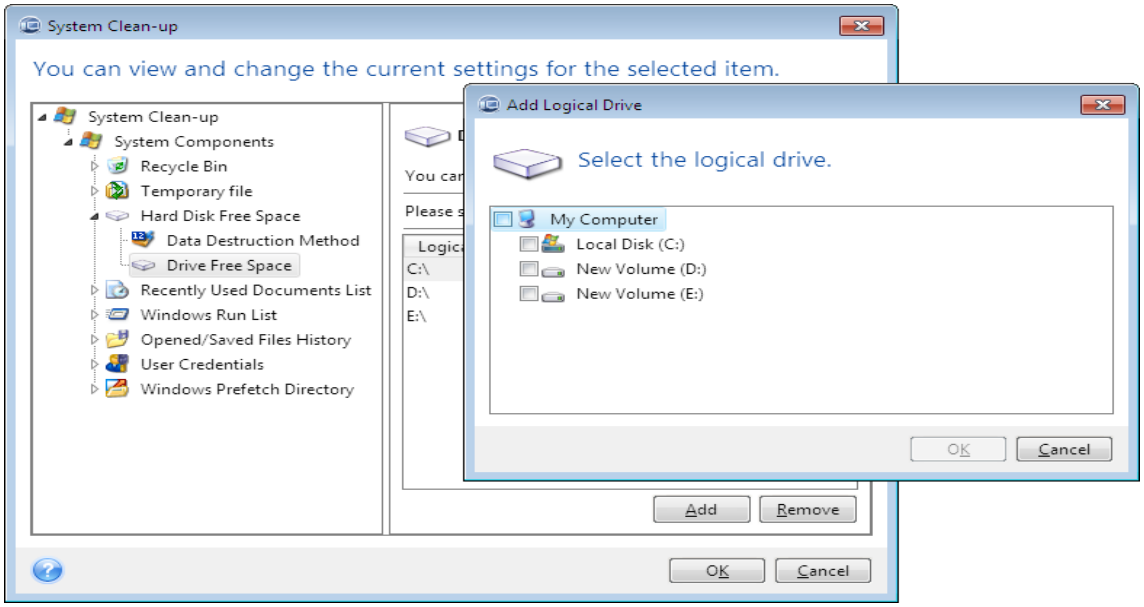
Upon entering the Files setting value, you can browse the files matching the search strings. To do this, click **Show Files**. You will see a window with the names of the found files. These files will be cleaned.

Drive free space

Here you can manually specify physical and/or logical drives to clean up free space on. By default, System Clean-up cleans up free space on all available drives.

If you want to change the settings of this parameter, you can use the **Remove** button to delete from the list the drives you don't need to clean free space on.

If you wish to add these drives to the list again, use the **Add** button.



Computers

The **Computers** setting is used for cleaning up the registry search strings you have used for finding computers in the local network. These strings keep information on what has interested you in the network. These items should also be deleted to maintain confidentiality.

The **Computers** setting is similar to the **Files** setting. It is a string that can contain any number of full or partial computer names separated by semicolons. The deletion of computer search strings is based on a comparison with the **Computers** setting value according to Windows rules.

If you simply need to delete all local network computer search strings (suitable in most cases), just leave the default value of this setting. To restore the default settings:

- Select the **Find Computer List** component
- Make sure the **Enable** check box is selected
- Select the **Computers** setting; make sure its text box is clear.

As a result, all computer search strings will be deleted from the registry.

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After entering the **Computers** setting value, you can browse the search strings found by the System Clean-up Wizard in the registry. To do so, click **Show Computers**. You will see the window with full and partial computer names searched for in the network. These items will be deleted.

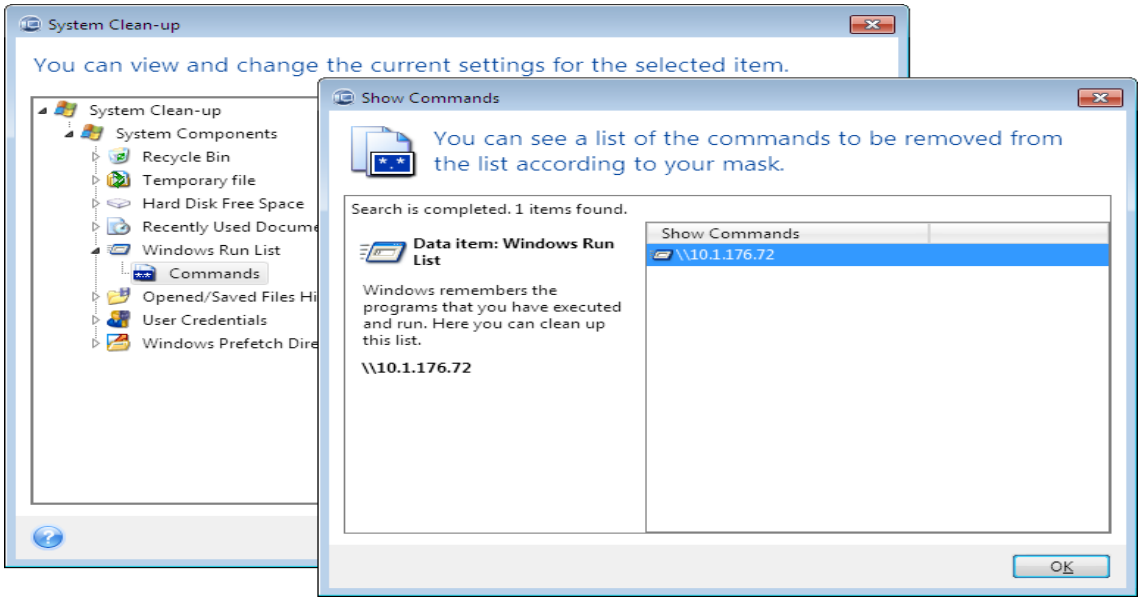
"Commands" setting

Here you can select the commands to remove during **Windows Run List** clean-up.

This template can contain any command names or their parts separated by semicolons, e.g.:

help; cmd; reg

This will result in removing commands with names corresponding to or containing any of the names or parts of names you entered.


System Clean-up
You can view and change the current settings for the selected item.
System Clean-up
System Components
Recycle Bin
Temporary file
Hard Disk Free Space
Recently Used Docume
Windows Run List
Commands
Opened/Saved Files Hi
User Credentials
Windows Prefetch Dire
Show Commands
You can see a list of the commands to be removed from the list according to your mask.
Search is completed. 1 items found.
Data item: Windows Run List
Windows remembers the programs that you have executed and run. Here you can clean up this list.
\\10.1.176.72
Show Commands
\\10.1.176.72
OK

Network places filter

Here you can enter (separated by semicolons) any hostnames or IP addresses of network places, servers, FTP servers, network shares, etc. to which you have made connection by supplying network credentials (a user name and password). While entering hostnames and IP addresses you can use * and ? wildcards.

Click **Show network places** to view the list of network places that you visited using the credentials you want to delete.

7.6.3.4 Preview

When the scanning is finished, its results will be available in the upper part of the wizard window. By default, all system components are scanned for clean-up. If you want to customize which of the system components should be scanned and which should not, change the default clean-up settings.

You can view the search results and manually select/unselect the items you wish to clean up/keep. In order to help you with making the right choice, all the components are provided with brief descriptions. Just click on the component's name and its description will be displayed in the right side of the window.

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To select/unselect a component

- Expand the **System Components** item in the System Clean-up tree and make sure that the component you wish to clean up is selected. If you do not want to clean up a component, simply clear its check box.
- If required, you can dig deeper by expanding a component and selecting/unselecting its contents.

Having specified the components for clean-up, click the **Clean-up** button to continue.

Windows Vista and Windows 7 do not keep information on file and computer searches. Furthermore, information on opened/saved files is stored in the registry differently, so the wizard shows this information in a different way.

7.6.3.5 Clean-up progress

The operation status window reports about the state of the current operation.

The progress bar indicates the level of completion of the selected operation.

In some cases, the operation may take a long time to be completed. If this is the case, select the **Shutdown the computer after completion** check box. When the operation finishes, Acronis True Image Home 2011 will turn the computer off.

7.6.4 Hard Disk Wiping methods

Information removed from a hard disk drive by non-secure means (for example, by simple Windows delete) can easily be recovered. Utilizing specialized equipment, it is possible to recover even repeatedly overwritten information. Therefore, guaranteed data wiping is more important now than ever before.

The **guaranteed wiping of information** from magnetic media (e.g. a hard disk drive) means it is impossible to recover data by even a qualified specialist with the help of all known tools and recovery methods.

This problem can be explained in the following way: Data is stored on a hard disk as a binary sequence of 1 and 0 (ones and zeros), represented by differently magnetized parts of a disk.

Generally speaking, a 1 written to a hard disk is read as 1 by its controller, and 0 is read as 0. However, if you write 1 over 0, the result is conditionally 0.95 and vice versa – if 1 is written over 1 the result is 1.05. These differences are irrelevant for the controller. However, using special equipment, one can easily read the «underlying» sequence of 1's and 0's.

It only requires specialized software and inexpensive hardware to read data "deleted" this way by analyzing magnetization of hard disk sectors, residual magnetization of track sides and/or by using current magnetic microscopes.

Writing to magnetic media leads to subtle effects summarized as follows: every track of a disk stores **an image of every record** ever written to it, but the effect of such records (magnetic layer) becomes more subtle as time passes.

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7.6.4.1 Functioning principles of Information wiping methods

Physically, the complete wiping of information from a hard disk involves the switching of every elementary magnetic area of the recording material as many times as possible by writing specially selected sequences of logical 1's and 0's (also known as samples).

Using logical data encoding methods in current hard disks, you can select **samples** of symbol (or elementary data bit) sequences to be written to sectors in order to **repeatedly and effectively wipe confidential information.**

Methods offered by national standards provide (single or triple) recording of random symbols to disk sectors that are **straightforward and arbitrary decisions, in general**, but still acceptable in simple situations. The most effective information-wiping method is based on deep analysis of subtle features of recording data to all types of hard disks. This knowledge speaks of the necessity of complex multipass methods to **guarantee** information wiping.

The detailed theory of guaranteed information wiping is described in an article by Peter Gutmann. Please see:

Secure Deletion of Data from Magnetic and Solid-State Memory.

7.6.4.2 Information wiping methods used by Acronis

The table below briefly describes information wiping methods used by Acronis. Each description features the number of hard disk sector passes along with the number(s) written to each sector byte.

The description of built-in information wiping methods

No.	Algorithm (writing method)	Passes	Record
1.	United States Department of Defense 5220.22-M	4	1st pass – randomly selected symbols to each byte of each sector, 2 – complementary to written during the 1st pass; 3 – random symbols again; 4 – writing verification.
2.	United States: NAVSO P-5239-26 (RLL)	4	1st pass – 0x01 to all sectors, 2 – 0x27FFFFFF, 3 – random symbol sequences, 4 – verification.
3.	United States: NAVSO P-5239-26 (MFM)	4	1st pass – 0x01 to all sectors, 2 – 0x7FFFFFFF, 3 – random symbol sequences, 4 – verification.
4.	German: VSITR	7	1st – 6th – alternate sequences of: 0x00 and 0xFF; 7th – 0xAA; i.e. 0x00, 0xFF, 0x00, 0xFF, 0x00, 0xFF, 0xAA.
5.	Russian: GOST P50739-95	1	Logical zeros (0x00 numbers) to each byte of each sector for 6th to 4th security level systems. Randomly selected symbols (numbers) to each byte of each sector for 3rd to 1st security level systems.
6.	Peter Gutmann's method	35	Peter Gutmann's method is very sophisticated. It's based on his theory of hard disk information wiping (see Secure Deletion of Data from Magnetic and Solid-State Memory).
7.	Bruce Schneier's method	7	Bruce Schneier offers a seven-pass overwriting method in his Applied Cryptography book. 1st pass – 0xFF, 2nd pass – 0x00, and then five times with a

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No.	Algorithm (writing method)	Passes	Record
			cryptographically secure pseudo-random sequence.
8.	Fast	1	Logical zeros (0x00 numbers) to all sectors to wipe.

7.7 Mounting an image

Acronis True Image Home 2011 offers mounting for images and exploring for both images and file-level backups.

Exploring images and file-level backups lets you view their contents and copy the selected files to a hard disk. To explore a backup in Windows Explorer, double-click on the corresponding tib file. You can also right-click on the file and choose **Explore** in the shortcut menu.

When you copy files from a backup being explored, the copied files lose the "Compressed" and "Encrypted" attribute. If you need to keep these attributes, it is recommended to recover the backup.

Mounting images as virtual drives lets you access them as though they were physical drives. Such ability means that:

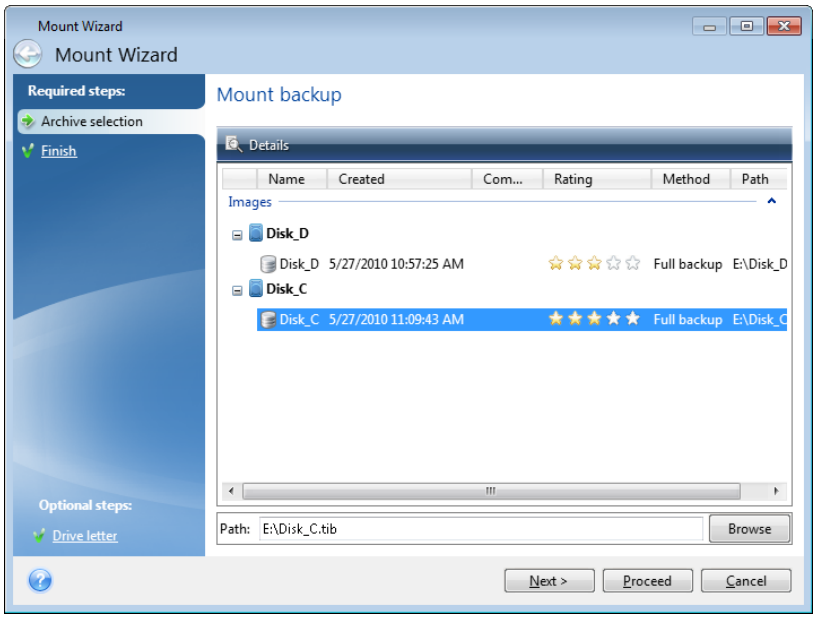
- a new disk with its own letter will appear in the drives list
- using Windows Explorer and other file managers, you can view the image contents as if they were located on a physical disk or partition
- you will be able to use the virtual disk in the same way as the real one: open, save, copy, move, create, delete files or folders. If necessary, the image can be mounted in read-only mode.

The operations described in this section are supported only for the FAT and NTFS file systems.

Please keep in mind that, though both file backups and disk/partition images have a default ".tib" extension, only **images** can be mounted. If you want to view file backup contents, use the Explore operation.

How to mount an image

1. Start the Mount wizard by clicking **Mount image** on the **Tools & Utilities** screen.
2. Select the backup for mounting.



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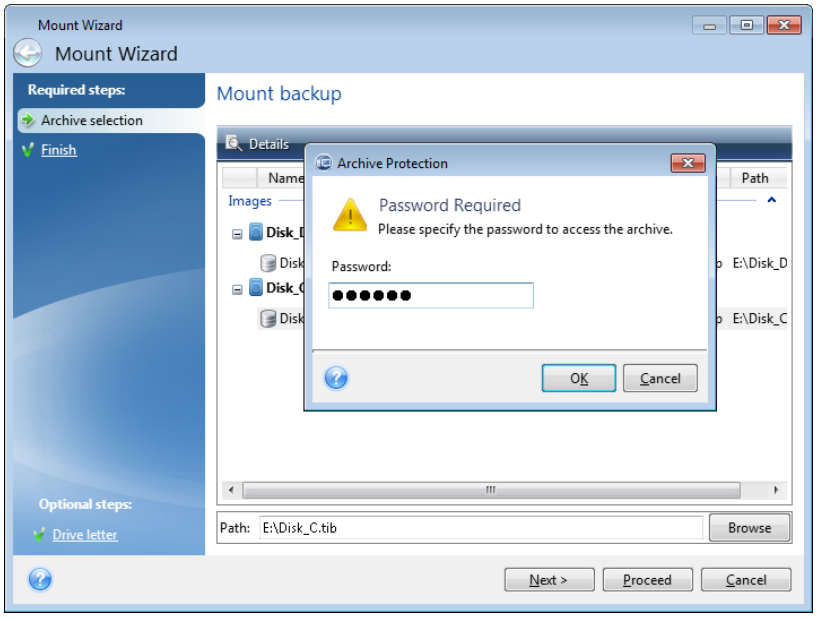
If you selected a backup containing incremental images, you can select one of the successive incremental images (also called "backup versions") by its creation date/time. Thus, you can explore the data state at a certain moment.

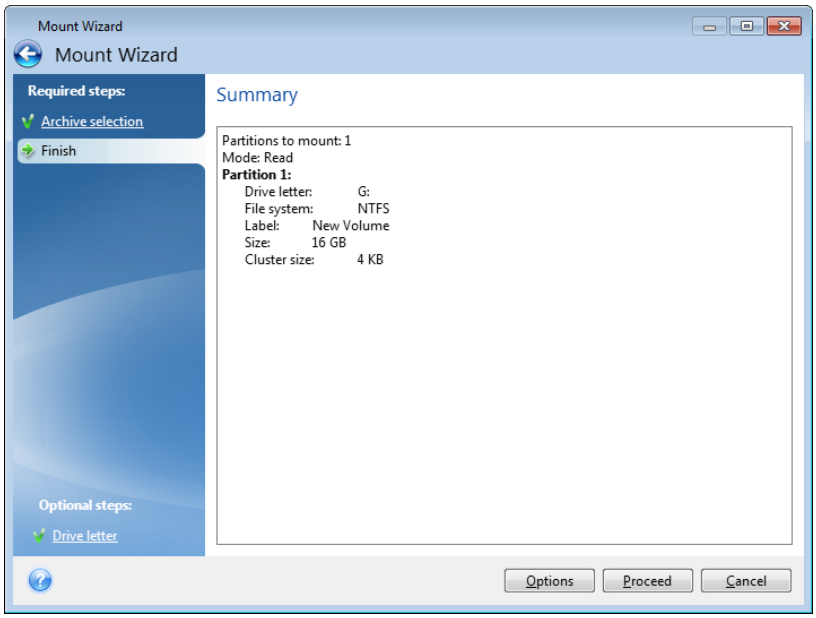
To mount an incremental image, you must have all previous backup versions and the initial full backup. If any of the successive backups are missing, mounting is not possible.

To mount a differential image, you must have the initial full image as well.

If the backup was password-protected, Acronis True Image Home 2011 will ask for the password in a dialog box. Neither the partitions layout will be shown, nor will the **Next** button be enabled until you enter the correct password.



3. Select a partition to mount as a virtual disk. (Note that you cannot mount an image of the entire disk except in the case when the disk consists of one partition). If the image contains several partitions, by default all of them will be selected for mounting with automatically assigned drive letters. If you would like to assign different drive letters to the partitions to be mounted, click **Options**.



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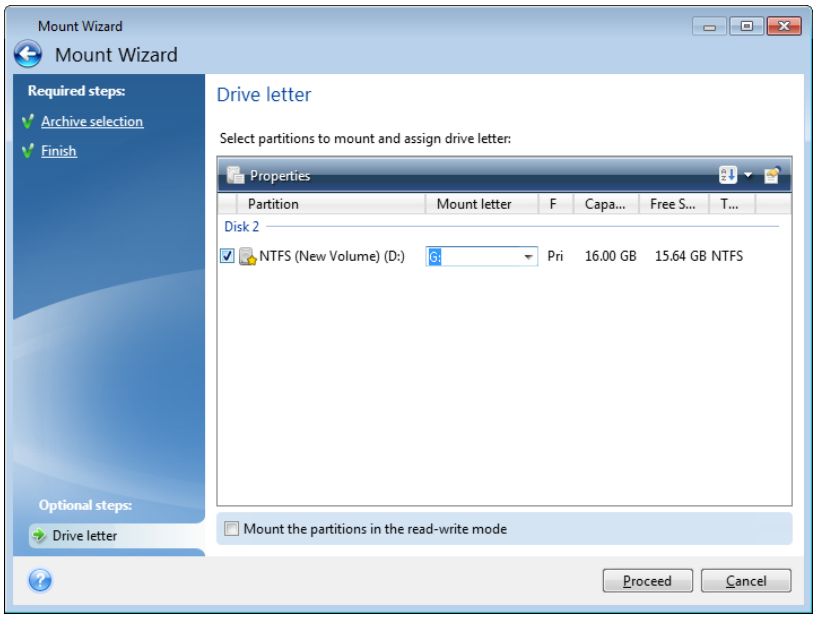
You can also select a letter to be assigned to the virtual disk from the **Mount letter** drop-down list. If you do not want to mount a partition, select **Do not mount** in the list or clear the partition's check box.



4. If you select the **Mount the partitions in the read-write mode** box, the program assumes that the mounted image will be modified and creates an incremental backup file to capture the changes. It is strongly recommended that you list the forthcoming changes in the Comments section to this file. For you to be able to make comments, the optional **Comments** step appears in the wizard.
5. Having finished the settings, click **Proceed** to connect the selected partition images as virtual disks.
6. After the image is connected, the program will run Windows Explorer, showing its contents. Now you can work with files or folders as if they were located on a real disk.

7.8 Unmounting an image

We recommend that you unmount the virtual disk after all necessary operations are finished, as maintaining virtual disks takes considerable system resources. If you do not unmount the disk, it will disappear after your computer is turned off.

To disconnect the virtual disk, click **Unmount image** on the **Tools & Utilities** screen, select the disk to unmount and click **OK**.

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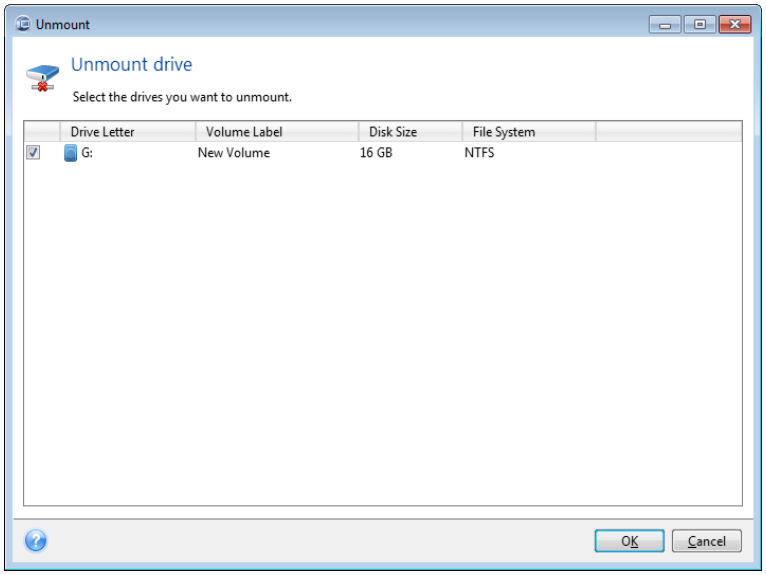
If you have mounted several partitions, by default all of them will be selected for unmounting. You can disconnect all mounted drives together or disconnect only those you do not need mounted anymore.



You can also do this in Windows Explorer by right-clicking on the disk icon and choosing **Unmount**.

7.9 Working with vhd files

In this section

Converting tib images into vhd virtual disks and vice versa 203
Recovery using vhd files created by Windows Backup 205
Booting from a tib image of your Windows 7 system partition 206
Acronis Boot Sequence Manager.....207

7.9.1 Converting tib images into vhd virtual disks and vice versa

The standalone versions of Acronis True Image Home 2011 that start when booting from the rescue media do not support conversion operations.

7.9.1.1 Converting Acronis backup

Users of the Enterprise and Ultimate editions of Windows 7 can convert a tib image of the system partition into the vhd format if they want to use the converted vhd file for booting the operating system. Or, they may want to get the ability to mount images without using Acronis True Image Home 2011.

To convert an Acronis disk image (tib file) to a vhd virtual disk:

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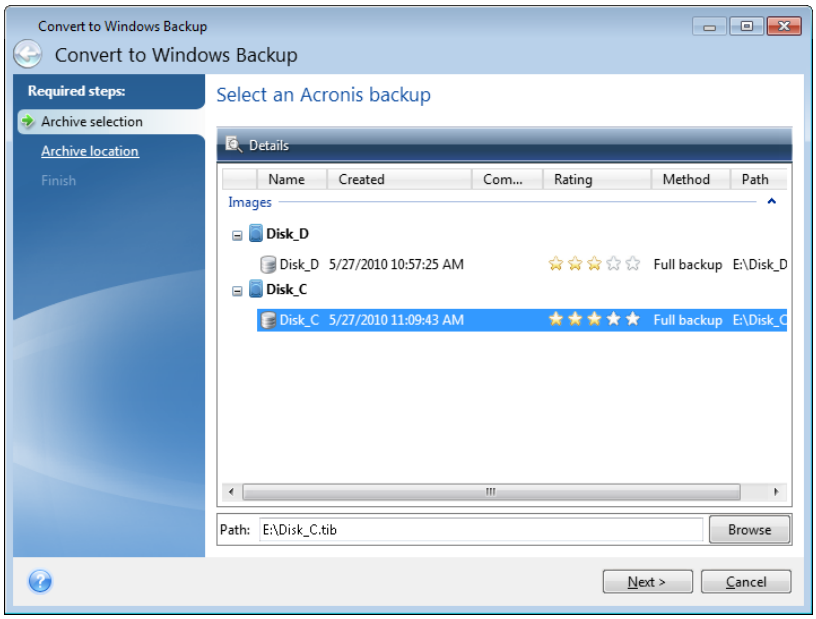
1. Click **Convert Acronis backup to Windows backup** on the **Tools & Utilities** screen.



2. Select the disk image to convert.

   If the backup is password-protected, Acronis True Image Home 2011 will ask for it. Note that the resulting vhd file will lose password protection.

   Converting an incremental backup requires all the previous incremental backups and the original full backup. Converting a differential backup requires the original full backup. The result of conversion will always be a full backup.

3. Specify the path to the file to be created.

   The converted file will be saved to the default location, but you can select another one by clicking **Browse**. The file can be directed to any local storage supported by Acronis True Image Home 2011 (except the Acronis Secure Zone and CD/DVD). In addition, it can be directed to an SMB share.

4. Click **Proceed** in the Summary window.

When a tib image selected for conversion contains partitions, for example, from two physical hard disk drives, the program will create two vhd files corresponding to those physical drives.

Acronis True Image Home 2011 cannot convert tib files containing images of spanned and striped dynamic volumes.

7.9.1.2 Converting Windows backup

Windows Vista and Windows 7 users can convert vhd files created by Windows Backup into Acronis backups. This may be needed if you want to keep the earlier Windows Backup files, but decide to convert them into tib files to save storage space. The converted tib files are smaller than the corresponding vhd files due to compression.

Do not move vhd files from the folder to where they were saved by Windows Backup (by default, the folder has the name "WindowsImageBackup"). Otherwise, the operating system may be unbootable after recovery of the system partition from the converted tib file.

The virtual to physical conversion is done as follows:

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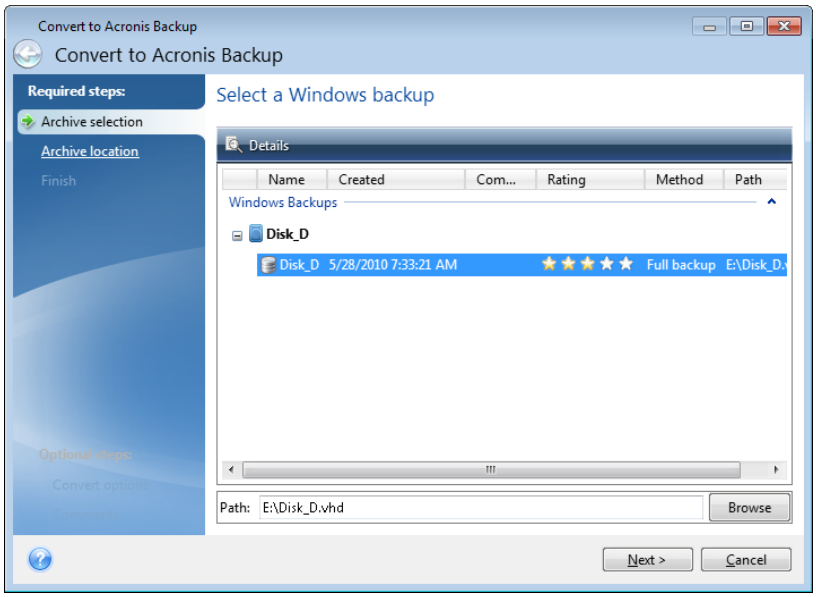
1. Click **Convert Windows backup to Acronis backup** on the **Tools & Utilities** screen.



2. Select the vhd file to convert.
3. Specify the path to the tib file to be created.

   By default, the converted file will be created in the same location as the file to be converted. However, you can select another location by clicking **Browse**. The file can be directed to any storage supported by Acronis True Image Home 2011, except for Acronis Secure Zone.
4. The next step allows you to set options for the tib backup to be created. You can protect the backup with a password and encryption, select a desired compression level, and split the backup, for example, for later burning to DVDs.
5. Add comments to the backup, if you wish.
6. Click **Proceed** in the Summary window.

Acronis True Image Home 2011 cannot convert vhd files containing dynamic volumes which were originally located on more than one disk drive (striped or spanned on two or more disk drives).

7.9.2 Recovery using vhd files created by Windows Backup

You may have vhd files if you used the Windows Backup utility included into Windows Vista and Windows 7 for backing up the system hard drive.

If you purchased Acronis True Image Home 2011 after using Windows Vista or Windows 7 backup utility, you can recover your system hard drive from those vhd files using Acronis True Image Home 2011.

When you need to recover your system using a vhd backup file, proceed as follows:

1. Arrange the boot order in BIOS so as to make your rescue media device (CD, DVD or USB stick) the first boot device. See Arranging boot order in BIOS (p. 89).
2. Boot from the rescue media and select Acronis True Image Home 2011 (Full version).
3. After Acronis True Image Home 2011 starts, click the **My Disks** link under **Recover** on the Welcome screen.

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4. Choose the vhd backup file to be used for recovery by its creation date. When the required vhd backup is not shown, click **Browse**, choose Windows Backup Archives (*.vhd) in the "Files of type" field and locate the backup for recovery.

   *Even if the required vhd backup is shown on the screen, after you choose it Acronis True Image Home 2011 may display the following message: "Acronis True Image Home 2011 cannot detect volume 1 of "Backup_Name" archive", where Backup_Name is the name of the chosen backup. This is because disk letters in the standalone Acronis True Image Home 2011 may differ from those in Windows and the path to this backup stored in the metadata information will point to the wrong location. In such case click **Browse**, choose Windows Backup Archives (*.vhd) in the "Files of type" field and locate the backup for recovery.*

5. At the next step select **Recover whole disks and partitions** (if it is not selected) and click **Next**.
6. Select the system partition at the **What to recover** step. Usually you will not need to recover the MBR.
7. Then specify the settings of the selected system partition: location, type (primary, active) and size. When recovering the partition to the original location, you do not need to make any setting changes.
8. Read the Summary of the recovery operations and then click **Proceed**.

You can also recover partitions and disks from vhd files while working in Windows. This is preferable for recovering data partitions and disks.

7.9.3 Booting from a tib image of your Windows 7 system partition

As already mentioned, users of the Enterprise and Ultimate editions of Windows 7 can boot from tib images of Windows 7 system partition. This allows you to test bootability of the backed up system without actual recovery. Booting can be done only when running Acronis True Image Home 2011 in Windows.

If you have Windows 7 Enterprise or Ultimate and want to test whether your Windows 7 system partition backup will recover to a bootable operating system, proceed as follows:

1. Open Acronis Boot Sequence Manager by clicking **Boot Sequence Manager** on the **Tools & Utilities** screen.
2. Click **Add** on the toolbar of Acronis Boot Sequence Manager and browse for the required tib file, then click **OK**.
3. Because actual booting is performed from VHD, the program needs to convert the selected tib file so the appropriate dialog will appear.
4. Click **OK** if you want to save the converted file to the default location with the same name or browse for another location. Saving to another location allows you to change the name of the vhd file.

   Booting is possible only when the vhd file is located on an NTFS-formatted local hard disk.

   If there is not enough space for the converted file in the selected location, the program will notify you. You can delete unnecessary files and click **Retry** or cancel the conversion and repeat the operation choosing another location for the converted file.
5. After the conversion process finishes a new line with the vhd filename will be added to the Acronis Boot Sequence Manager.

   To use the VHD for booting, the partition with the converted vhd file must have sufficient free space. Tib files are converted into dynamic VHDs with the maximum size that equals the size of a partition backed up

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into a tib file. When you boot from a dynamic vhd file, the VHD is automatically expanded to the maximum size. If the physical host partition of the vhd file does not have enough free disk space for the maximum size of the dynamic VHD, the boot process will fail. Furthermore, you need to have additional space for the paging file (Pagefile.sys), as the paging file is created on the host partition outside the virtual one. Microsoft states that you should estimate approximately 5 GB of available space in addition to the maximum size of the vhd file. So the estimated free space is the size of your system partition plus 5 GB. From the above, it follows that you cannot boot from the vhd file if it is located on your system partition.

6. Reboot the computer and select the new entry in the Acronis Boot Sequence Manager list for booting, then click **OK**. If Windows boots normally, you can be quite sure that the backup will recover to a bootable Windows 7 operating system.
7. After making sure that the tib image is bootable, you can remove its entry from the Acronis Boot Sequence Manager list. To do so, select the entry and click **Remove** on the toolbar. Acronis True Image Home 2011 will ask to confirm removal. You may also want to delete the vhd file used for booting. If so, open Windows Explorer and delete the file.

7.9.4 Acronis Boot Sequence Manager

Acronis Boot Sequence Manager allows you to add Windows 7 system partition images to the booting list and then manage the list.

You can add to the list images backed up both in the vhd and tib formats. Adding a tib image requires converting it into the vhd format. More detailed information on booting from tib images is provided in the previous section.

Actual booting is carried out using Windows boot loader. Acronis Boot Sequence Manager just adds virtual disks (vhd files) to the Windows boot loader' list of disks available for booting to Windows 7.

If you do not select from where to boot, then by default the computer boots from the first entry in the booting list after waiting for a time interval specified in the Boot Timeout field. To change the default boot disk (either physical or virtual), you can move entries up and down in the list using the corresponding buttons on the toolbar.

Clicking the **Rename** button allows you to assign a desired name to a list entry.

When you no longer need an entry in the list, you can remove it by clicking **Remove** on the toolbar.

The **Remove all** button allows you to remove all entries related to virtual disks and restore the original booting configuration.

7.10 Importing and exporting backup settings

Acronis True Image Home 2011 allows you to import and export the settings of your backups. This may be desirable if you need to transfer the settings to a new PC after installing Acronis True Image Home 2011 on that computer. Saving the settings may also be useful if you later decide to upgrade to the next Acronis True Image Home 2011 version.

Such transfer will make configuring backups on the new PC much easier. You only need to export the settings and then import them to the other PC. The settings are exported in the form of script files.

The settings content can be different depending on a backup type. In case of "classic" disk and file type backups the settings consist of the following items:

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- list of items for backup
- backup options
- backup location
- schedule
- backup scheme
- automatic clean-up rules
- backup version naming rules

The settings of Nonstop Backup are as follows:

- list of items for nonstop protection
- Nonstop Backup data storage location (a list of locations, if there are several)

You cannot import Online Backup settings from one computer to another.

To export the settings of your existing backups, click **Tools & Utilities** on the menu bar. Then click **Export backup settings** and browse for the destination to save the script files with the settings.

To import the settings, start Acronis True Image Home 2011 on another computer and click **Tools & Utilities** on the menu bar. Then click **Import backup settings** and show the path to the script files with the settings.

After importing the settings you may need to change some of them to suit the new environment. For example, it may be necessary to change the list of items for backup, backup destination, etc.

If you want to copy some of your backups to another computer, it is recommended to export the settings of those backups too. Thus you will not lose some of the copied backup's functionality.

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8 Troubleshooting

In this section

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Acronis System Report 210
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Creating a custom rescue CD 212
Viewing Log 212
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8.1 General recommendations

The below information may help you in troubleshooting issues encountered during installation and use of Acronis True Image Home 2011.

Quite often the cause of an issue may be trivial. For example, a loose connection of an external hard drive. Before trying other solutions described in this chapter, it is advisable to check if the issue is caused by one of the following:

- loose connections to the external drive;
- poor quality connecting cable;

When using an external USB hard drive, try the following additional suggestions:

- if the drive is connected through a hub, connect it directly to a rear connector of your PC;
- to prevent conflict with other USB devices attached to your PC, try disconnecting all the USB devices (except the mouse and keyboard).

You can try to find the solution to your problem in the Acronis Support Knowledge Base (KB). To access the Support KB, click on the following link: http://kb.acronis.com/. Then use the Search function. Enter the key words related to your problem into the appropriate field and click Search. The KB may have recommendations on solving your specific problem. Acronis Support team continuously adds new articles to the KB. If you are not able to find the solution to your problem in the KB or the suggested solution(s) does not help, feel free to contact Acronis Customer Central at http://www.acronis.com/support/.

To contact Acronis Support personnel for urgent or time-sensitive issues, it is recommended to use the Chat service. To access the Chat service, please use the wizard set at:

http://www.acronis.com/support/ --> Contact support --> Start here

When your issue is an error encountered during Acronis True Image Home 2011 operation, the error message box will contain the **Knowledge Base** button. Clicking the button will take you to a Support KB article offering solution(s) for the issue that caused the error. The error message box will also have a link to the Acronis Support KB. This link may be useful when the KB does not have the appropriate article yet. Clicking the link will take you to a Web form. There, you can enter the event code displayed in the error box to search for a solution in the entire KB. For more information, see Acronis Smart Error Reporting (p. 210).

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System report

Acronis Support personnel may request you to provide the system report. To create the report, select **Generate system report** in the **Help** menu, then save the report and send it to Acronis Customer Central. For more information see Acronis System Report (p. 210).

8.2 Acronis System Report

When you contact the Acronis support team, they will usually need information about your system in order to resolve your problem. Sometimes getting the information is an inconvenient process and may take a long time. The Generate system report tool simplifies the procedure. It generates a system report containing all the necessary technical information and allows you to save the information to file. When it's necessary, you can attach the created file to your problem description and send it to Acronis support team. This will simplify and speed up the search for a solution.

To generate a system report:

- On the main program window click the **Help** arrow, and select **Generate system report**, or
- Press **CTRL+F7**. Note that you can use the key combination even when Acronis True Image Home 2011 is performing any other operation.

After the report is generated:

- To save the generated system report to file, click **Save** and in the opened window specify a location for the created file.
- To save the report to file and send it to Acronis support team by e-mail, click **Save and send**.
- To exit to the main program window without saving the report, click **Cancel**.

You can place the tool on your bootable rescue media as a separate component to be able to generate a system report when your computer cannot boot. After you boot from the media, you will be able to generate the report even without running Acronis True Image Home 2011. In this case you should plug in a USB flash drive before clicking the **Acronis System Report** icon. The generated report will be saved on the USB flash drive.

To place the Acronis System Report tool on a bootable rescue media:

- Select the **Acronis System Report** check box on the **Rescue Media Content Selection** page of the **Acronis Media Builder** wizard.
- Click **Next** to continue.

8.3 Acronis Smart Error Reporting

To help users with troubleshooting, the new releases of Acronis products employ the so called Acronis Smart Error Reporting. When an issue is caused by an error in the program's operation, Acronis True Image Home 2011 displays an appropriate error message. The error message contains an event code and a short description of the error (sometimes with a possible solution), for instance:

"Check the disk and file system for errors and try to repeat the operation

Event Code: 0x000101F6"

The error message may also include the program module where the error has occurred and the error message from the module.

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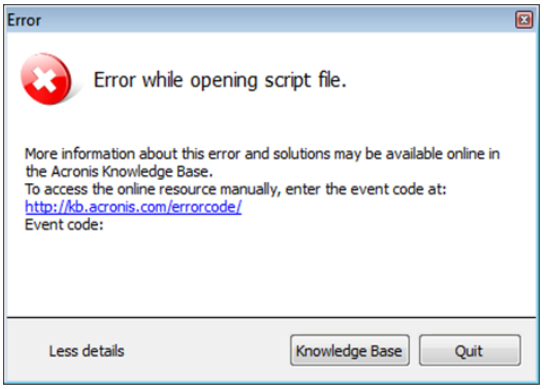
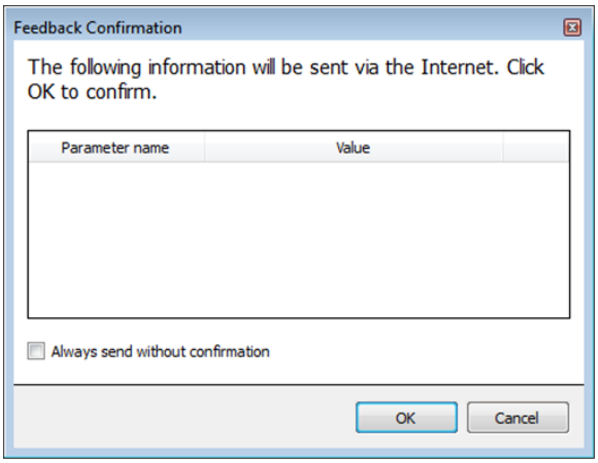
You can view more detailed information about the error by clicking the **More details** link in the message box. The detailed information may look like as is shown on the following screen shot:


Error
Error while opening script file.
More information about this error and solutions may be available online in the Acronis Knowledge Base.
To access the online resource manually, enter the event code at:
http://kb.acronis.com/errorcode/
Event code:
Less details
Knowledge Base
Quit

To view the Acronis Knowledge Base article suggesting a solution(s) for correcting the error, click the **Knowledge Base** button.

This will open a confirmation window that lists the information to be sent via Internet to the Acronis Knowledge Base. Click **OK** to permit sending the information.



If in future you would like to send such information without confirmation, select the **Always send without confirmation** check box.

If you do not have Internet access when such an error message is shown (this may happen, for example, when booted from the rescue media), please write down the event code. When you establish Internet connection or if you can use another computer where Internet connection is available, use the following URL to go to the Acronis Web site error reporting form: http://kb.acronis.com/errorcode/.

Select the Acronis product version you use and manually enter the event code into the appropriate field. Then, click the Search button to search for an article that may contain the solution to your issue.

Sometimes, an error may occur in a low-level program module and then propagate to higher-level modules resulting in errors in those modules as well. This is a so called composite error, where every higher level module generates its own error (event) code. The following error message is an example:

"Failed to start Try & Decide

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More information about this error and an applicable solution may be available online in the Acronis Knowledge base.

To access the online resource manually, enter the event code at: http://kb.acronis.com/errorcode/

Event code: 0x00970007+0x00970016+0x00970002"

The event codes from different modules are combined with "+" symbols. When manually entering such event codes into the appropriate field to search in the Knowledge Base, enter the event code components without spaces around the "+" symbols.

If the event code(s) is not recognized in the Knowledge Base, the base does not yet contain an article to resolve the issue. In such cases, please open a trouble ticket with Acronis Customer Central.

8.4 Creating a custom rescue CD

If the recovery environment cannot detect some of the hard disk drives or the network adapter, usually there is a problem with the drivers. Acronis rescue CD cannot contain drivers for all hardware on the market. So when the standard rescue CD lacks some of your hardware drivers, you need to create a custom one.

The Linux-based recovery environment used by Acronis does not provide the ability for users to add new drivers. Because of this, you should request Acronis Customer Service Department to create a custom rescue CD that will have all the drivers you need.

Before making a request, collect the information about your system. Select **Generate System Report** in the Help menu. Acronis True Image Home 2011 will automatically collect the required information and display a list of what is collected in the report. In the process of creating the report the program may install some components required for collecting the necessary information. When the report is complete, click **Save As** and select the desired folder or leave the default **My Documents** folder. The program will archive the report into a zip file. Send the file to the Acronis Customer Service Department. They will build an iso image of a custom rescue media compatible with your computer hardware and send you an iso file. Burn this file to a CD/DVD using a program that can handle iso files such as Nero. Incidentally, this report may also be useful when you request the Acronis Customer Service Department to help you with a problem.

After burning your custom rescue CD, test it to make sure that your hard disk drives and network adapter are now detected in the recovery environment.

8.5 Viewing Log

The log can provide information, for instance, about scheduled backup results, including reasons for any failures.

Most Acronis True Image Home 2011 operations write their own entries in the logs, though logs are not provided for the Try&Decide operation, image mounting/unmounting, Acronis Startup Recovery Manager activation/deactivation, and bootable media creation.

The logs contain only partial information on Acronis Nonstop Backup operations. The remaining information on operation of that feature is written to its own log. That log is not available to users as it is intended for Acronis Support personnel to help in troubleshoot the issues users have with the feature. It is included in Acronis System Report.

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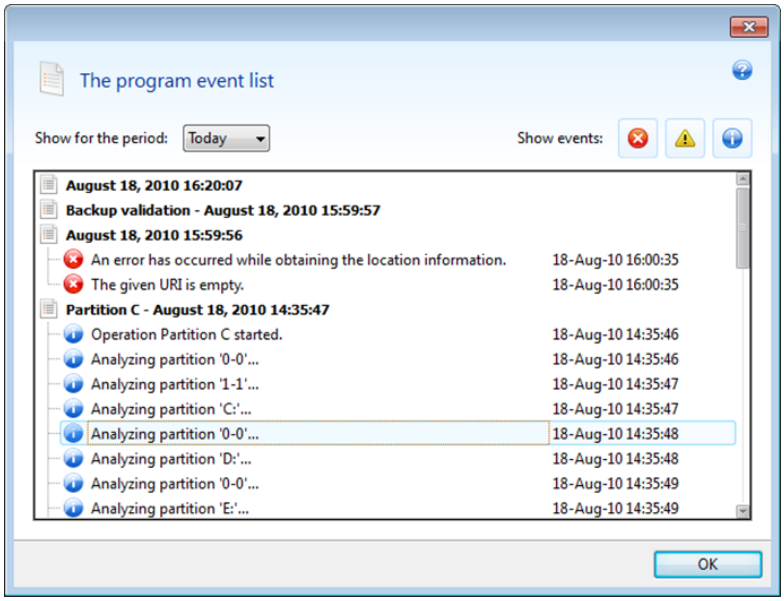
If you want to view the log of Acronis True Image Home 2011 operations, click **Help** → **View log** in the upper right corner of the main window.


The program event list
Show for the period:
Today
Show events:
August 18, 2010 16:20:07
Backup validation - August 18, 2010 15:59:57
August 18, 2010 15:59:56
An error has occurred while obtaining the location information. 18-Aug-10 16:00:35
The given URI is empty. 18-Aug-10 16:00:35
Partition C - August 18, 2010 14:35:47
Operation Partition C started. 18-Aug-10 14:35:46
Analyzing partition '0-0'... 18-Aug-10 14:35:46
Analyzing partition '1-1'... 18-Aug-10 14:35:47
Analyzing partition 'C:'... 18-Aug-10 14:35:47
Analyzing partition '0-0'... 18-Aug-10 14:35:48
Analyzing partition 'D:'... 18-Aug-10 14:35:48
Analyzing partition '0-0'... 18-Aug-10 14:35:49
Analyzing partition 'E:'... 18-Aug-10 14:35:49
OK

To view the logs for a specific period, select the period from the drop-down list. You can select **Today**, **Week**, and **Month.** To view all logs, select **All**.

To delete a log entry, select it, right-click and select **Delete** in the shortcut menu. To delete all log entries, select **Delete all**. You can also save a log entry to file by selecting **Save**. To save all logs to file, select **Save all**.

The three buttons to the right control event filters: the white cross in the red circle filters error events, the exclamation mark in a yellow triangle filters warnings, and the "i" in the blue circle filters information message events.

8.6 Acronis Customer Experience Program

Acronis Customer Experience Program (CEP) is a new way to allow Acronis customers to contribute to the features, design and development of Acronis products. This program enables our customers to provide us with various information, including information about the hardware configuration of your host computer and/or virtual machines, the features you use most (and least), and the nature of the problems you face. Based on this information, we will be able to improve the Acronis products and the features you use most often.

If you choose to participate, the technical information will be automatically collected every 90 days. We will not collect any personal data, like your name, address, phone number, or keyboard input. Participation in the CEP is voluntary, however, but the end results intended to provide software improvements and enhanced functionality to better meet the needs of our customers.

Note that you will be able to leave the program any time.

Click the **Learn more** link to read the participation terms.

To make a decision:

- Choose **Yes, I want to participate in the program** if you want to join the program

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- Choose **No, I do not accept** if you do not want to join the program

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9 Glossary of Terms

A

Acronis Secure Zone

A secure partition for storing backups (p. 215) on a hard disk. Advantages:

- enables recovery of a disk to the same disk where the disk's backup resides
- offers a cost-effective and handy method for protecting data from software malfunction, virus attack, operator error
- eliminates the need for a separate media or network connection to back up or recover the data

Limitations:

1) The Acronis Secure Zone cannot be created on a dynamic disk or a disk using the GPT partitioning style.

2) The Acronis Secure Zone is not available as a location for backups in the recovery environment when you start Acronis True Image Home 2011 from bootable rescue media, through Acronis Startup Recovery Manager or Bart PE.

Acronis Startup Recovery Manager

A protection tool that allows to start standalone version of Acronis True Image Home 2011 at boot time when F11 is pressed. Acronis Startup Recovery Manager eliminates the need for rescue media.

Acronis Startup Recovery Manager is especially useful for mobile users. If a failure occurs, the user reboots the machine, hits F11 on prompt "Press F11 for Acronis Startup Recovery Manager..." and performs data recovery in the same way as with ordinary bootable media.

Limitations: cannot be organized on a dynamic disk; requires manual configuration of boot loaders, such as LILO and GRUB; requires re-activation of third-party loaders.

B

Backup

1. The same as Backup operation (p. 215).
2. A set of backup versions created and managed by using backup settings. A backup can contain multiple backup versions created using full (p. 216) and incremental (p. 216) backup methods. Backup versions belonging to the same backup are usually stored in the same location.

Backup operation

An operation that creates a copy of the data that exists on a machine's hard disk for the purpose of recovering or reverting the data to a specified date and time.

Backup settings

A set of rules configured by a user when creating a new backup. The rules control the backup process. Later you can edit the backup settings to change or optimize the backup process.

Backup version

The result of a single backup operation (p. 215). Physically, it is a file or a set of files that contains a copy of the backed up data as of a specific date and time. Backup version files created by Acronis True Image Home 2011 have a TIB extension. The TIB files resulting from consolidation (p. 216) of backup versions are also called backup versions.

Backup version chain

Sequence of minimum 2 backup versions (p. 215) that consist of the first full backup version and the subsequent one or more incremental or differential backup versions. Backup version chain continues till the next full backup version (if any).

Bootable media

A physical media (CD, DVD, USB flash drive or other media supported by a machine BIOS as a boot device) that contains stanalone version of Acronis True Image Home 2011.

Bootable media is most often used to:

- recover an operating system that cannot start
- access and back up the data that has survived in a corrupted system
- deploy an operating system on bare metal
- create basic or dynamic volumes on bare metal
- back up sector-by-sector a disk that has an unsupported file system

C

Consolidation

Combining two or more subsequent backup versions (p. 215) belonging to the same backup (p. 215) into a single backup version.

The consolidation procedure allows you to delete the backup versions you no longer need from any backup chain while maintaining the consistency of chain's backups. A chain to be consolidated consists of a full backup and one or more incremental backups. Consolidation keeps whichever backups you choose and deletes any backups that are not selected. Note that consolidation may take a lot of time and system resources (including disk space).

Acronis Nonstop Backup uses a different consolidation mechanism. In such cases, the program consolidates the metadata information it uses for managing the backed up data. This is because the metadata information volume is much less than the backed up data volume. Accordingly, consolidation requires much less time and system resources.

D

Differential backup

1. A backup method used for saving data changes that occurred since the last full backup version (p. 216) within a backup.
2. A backup process that creates a differential backup version (p. 216).

Differential backup version

A differential backup version stores changes to the data against the latest full backup version (p. 216). You need access to the corresponding full backup version to recover the data from a differential backup version.

Disk backup (Image)

A backup (p. 215) that contains a sector-based copy of a disk or a partition in packaged form. Normally, only sectors that contain data are copied. Acronis True Image Home 2011 provides an option to take a raw image, that is, copy all the disk sectors, which enables imaging of unsupported file systems.

F

Full backup

1. A backup method that is used to save all the data selected to back up.
2. A backup process that creates a full backup version (p. 216).

Full backup version

A self-sufficient backup version (p. 215) containing all data chosen for backup. You do not need access to any other backup version to recover the data from a full backup version.

I

Image

The same as Disk backup (p. 216).

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Incremental backup

1. A backup method used for saving data changes that occurred since the last backup version (p. 215) (of any type) within a backup.
2. A backup process that creates an incremental backup version (p. 217).

Incremental backup version

A backup version (p. 215) that stores changes to the data against the latest backup version. You need access to other backup versions from the same backup (p. 215) to restore data from an incremental backup version.

N

Nonstop backup

Nonstop backup actually is a disk/partition or file backup that is created using the Acronis Nonstop Backup feature. This is a set of one full backup version (p. 216) and a sequence of incremental backup versions (p. 217) that are created at short intervals. It gives almost continuous protection of data, that is, it allows recovery of previous data state at any recovery point you need.

Nonstop protection

Nonstop protection - the process that the Nonstop Backup feature performs when it is turned on.

O

Online backup

Online backup - a backup that is created using Acronis Online Backup. Online backups are stored in a special storage named the Online storage, accsessible over the Internet. The main advantage of an online backup is that all backups are stored on the remote location. It gives a garantee that all backed up data will be safe independently of a user local storages. To begin to use the Online storage a user should subscribe to the service.

R

Recovery

Recovery is a process of returning of a corrupted data to a previous normal state from a backup (p. 215).

V

Validation

An operation that checks whether you will be able to recover data from a particular backup version (p. 215).

When you select for validation…

- a full backup version (p. 216) - the program validates the full backup version only.
- a differential backup version (p. 216) - the program validates the initial full backup version and the selected differential backup version.
- an incremental backup version (p. 217) - the program validates the initial full backup version, the selected incremental backup version, and the whole chain (if any) of backup versions to the selected incremental backup version. If the chain contains one or more differential backup versions, the program validates (in addition to the initial full backup version and the selected incremental backup version) only the most recent differential backup version in the chain and all subsequent incremental backup versions (if any) between the differential backup version and the selected incremental backup version.

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